

LABORATORY CHEMICALS

TOP-PRODUCTS FOR YOU

CHEMSOLUTE®
A BRAND OF TH.GEYER


LABSOLUTE
150ml
125
100
75
VOLUMES
LABSOLUTE
2ml
100
80
60
40
20


CHEMSOL
CHEMS
30ml





CHOOSE CHEMSOLUTE® QUALITY
THE PERFECT SOLUTION FOR YOUR LABORATORY

CHEMSOLUTE®
A BRAND OF TH.GEYER

The brand offers you a wide range of first-class products and the perfect solution for your laboratory and the life science sector:

Laboratory chemicals from A to Z, customised solutions, indicator solutions, biological buffers, dehydrated and ready-to-use culture media, supplements and media components.

The chemicals, reagents, biological buffers and the microbiology product of CHEMSOLUTE® are:

- Suitable for laboratory use
- A wide range meets the requirements according to PH. Eur., ACS or ISO standards
- Highly reliable in terms of labelling, packaging and transport
- Supplied with detailed specifications

CUSTOMISED SOLUTIONS

Chemicals custom-made for you – sometimes even the widest selection of standard ready-to-use chemicals is not enough in the face of special requirements. That's why we have expanded our services to provide you with attractive options:

- Produced to your specifications and requirements
- Packaged and labelled for you
- Ground and screened for you

We are delighted to inform and advise you and look forward to receiving your enquiry for chemicals made to measure.



MICROBIOLOGICAL CULTURE MEDIA

CHEMSOLUTE® offers you a constantly growing range of dehydrated and ready-to-use culture media for the detection of microorganisms for a variety of applications.

- Dehydrated media
- Prepared plates
- Ready-to-use media in bottles, tubes and bags
- Supplements
- Media components

All products are listed starting from page 223.



OUR CONSTANTLY GROWING PRODUCT RANGE
SELECTED PRODUCTS FOR YOU



ACETONITRILE
Chemicals from A-Z
Page 21



AGAROSE STANDARD
Chemicals from A-Z
Page 24



AMMONIA SOLUTION
Chemicals from A-Z
Page 29



GLYCEROL
Chemicals from A-Z
Page 73



SULFURIC ACID
Chemicals from A-Z
Page 160



INDICATOR SOLUTION
Indicator solutions
Page 200



PBS BUFFER
Biological buffers
Page 208



PEPTONE WATER
Microbiological culture media
Page 248

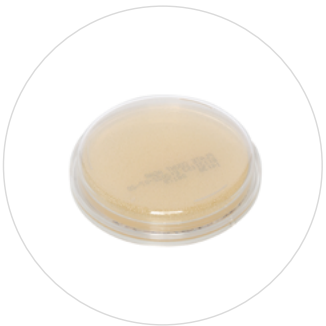


PLATE COUNT AGAR
Microbiological culture media
Page 250



ALPHABETICAL INDEX 8–12

LABORATORY CHEMICALS

CHEMICALS FROM A–Z 13–174

VOLUMETRIC SOLUTIONS 175–196

INDICATOR SOLUTIONS 197–200

DISSOLUTION MEDIA 201–206

BIOLOGICAL BUFFERS 207–208

ANALYTICAL MEASUREMENT AND TESTING 209–222

MICROBIOLOGICAL CULTURE MEDIA 223–268

SUPPLEMENTS 269–276

MEDIA COMPONENTS 277–280

MORE INFORMATION 281–301

NUMERICAL INDEX 302–309

IMPRINT 314

ALPHABETICAL INDEX

A

Absorbent CHEMSOLUTE® sorb 14
Acetic acid 14–16
Acetic acid volumetric solutions 190
Acetic anhydride 16
Acetone 17–20
Acetonitrile 21–23
Acetylacetone 23
Agar bacteriological 278
Agarose 24
Aluminium potassium sulphate dodecahydrate 24
Ammonia solution 29–30
Ammonium acetate 25
Ammonium cerium(IV) nitrate 25
Ammonium chloride 25–26
Ammonium dihydrogen phosphate 26
Ammonium heptamolybdate tetrahydrate 26
Ammonium hydrogen carbonate 27
di-Ammonium hydrogen phosphate 27
Ammonium iron(II) sulphate hexahydrate 27
Ammonium nitrate 28
Ammonium peroxodisulphate 28
Ammonium sulphate 30
Ammonium thiocyanate 30
Ammonium thiocyanate solution 176
Ammonium thiocyanate volumetric solution 190
Aniline 31
Ascorbic acid 31

B

Baird parker agar 224
Barium carbonate 31
Barium chloride dihydrate 32
Bariumhydroxide octahydrate 32
Benzaldehyde 32
Benzyl alcohol 33
Bile esculin azide agar 225
Bioethanol 63
N,O-Bis(trimethylsilyl)acetamide 33
N,O-Bis(trimethylsilyl)trifluoroacetamide 34
Blood agar 225
Boric acid 34–35
Brain heart infusion broth 226
Brilliant green agar 226
Brilliant green bile broth 227
Bromide bromate solution 176
Bromide bromate volumetric solution 190
1,4-Butanediol 35
1-Butanol 35
2-Butanol 36
tert.-Butanol 36
2-Butanone 36
n-Butyl acetate 37
tert.-Butyl methyl ether 37–38

C

Caesium chloride 38
Calcium acetate monohydrate 38
Calcium carbonate 39
Calcium chloride dihydrate 39
Calcium hydroxide 40
Calcium nitrate tetrahydrate 40
Calcium sulphate dihydrate 41
Casein peptone lecithin polysorbate broth 227
Cerium sulphate solution 176
Cetrimide agar 228
CFC selective supplement 270
Chlorobenzene 41
Chloroform 42–43
Chromium(III) chloride hexahydrate 43
Chromogenic coliform agar 228
Citric acid monohydrate 43–44
Citric acid solution 44
Cleaning products 44
- CHEMSOLUTE® alkaline universal liquid cleaner 45
- CHEMSOLUTE® surface disinfectant cleaner 44
Clostridium perfringens supplement 270
CN selective supplement 270
Cobalt(II) chloride hexahydrate 45
Columbia agar 229
Conductivity standard solutions 220–221
Copper(II) chloride 45
Copper(II) chloride dihydrate 46
Copper(II) sulphate pentahydrate 46
m-Cresol 47
Cyclohexane 47–48
Cyclohexanone 48
Cyclopentylmethylether 48
D-Cycloserine selective supplement 270

D

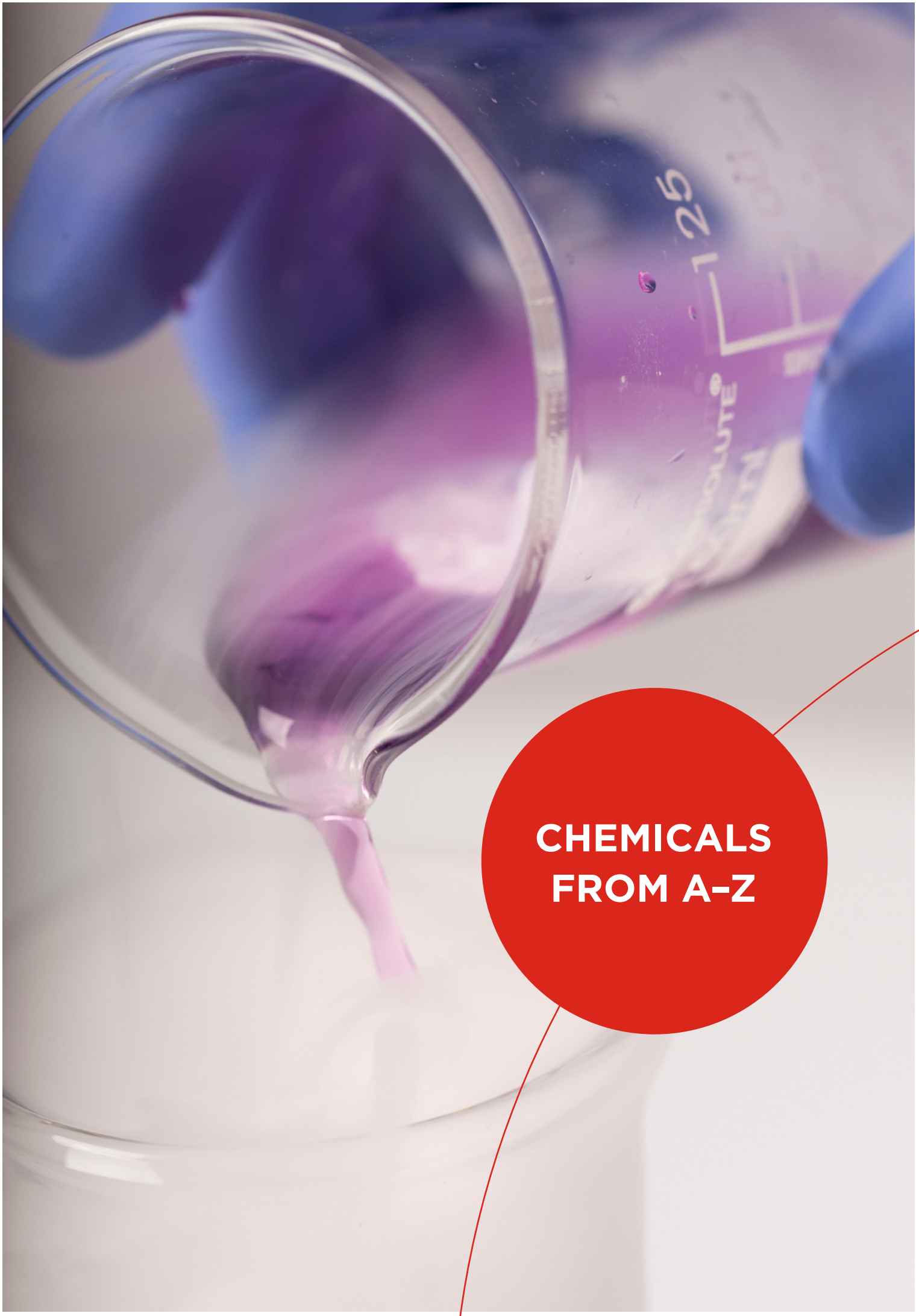
DG 18 agar 230
Dichloromethane 50–51
Diethanolamine 51–52
1,2-Dichlorobenzene 49
1,2-Dichloroethane 49–50
Diethylamine 52
Diethylene glycol 52
Diethylether 53

Dihydrolevoglucosenone	54
Diisopropyl ether	54
Diisopropylamine	54
Dimethyl sulfoxide	57
N,N-Dimethylacetamide	55
N,N-Dimethylformamide	55–56
N,N'-Dimethylpropylene urea	56
Dimidium bromide	58
1,3-Dioxolane	59
1,4-Dioxane	58
1,5-Diphenylcarbazid solution	60
Disinfection agent	59
- CHEMSOLUTE® Disinfect 2	59
- Ethanol 70 %	59
- Isopropanol 70 Biocide	60
Dissolution media concentrates	
- Acetate buffer	204
- Hydrochloric acid	204
- Phosphate buffer	204
- Potassium phosphate	205–206
- Sodium lauryl sulphate solution	206
Dissolution media ready to use (RTU)	
- Acetate buffer	202
- Sodium dodecyl sulphate	202
- FaSSIF V2 solution	202
- HCl/NaCl solution	202
- Hydrochloric acid	202
- Phosphate buffer	203
- Potassium phosphate	203
- Simulated gastric fluid	203
- Simulated intestinal fluid	203
DRBC agar	230
E	
EDTA disodium salt	69
EDTA disodium salt solution	177
EDTA disodium salt volumetric solution	191
Egg yolk emulsion	271
Egg yolk tellurite emulsion	271
Electrode cleaning solutions	220
Electrode filling solutions	219
Electrode storage solution	220
Enterobacteriaceae enrichment broth mossel	231
Ethanol	60–66
Ethanolamine	66
2-Ethoxyethanol	67
Ethyl acetate	67–68
Ethylene glycol	70
Ethylene glycol monobutyl ether	70
Ethylenediamine	69
Ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium salt)	69
F	
Fluid A	231
Fluid D	232
Fluid K	232
Formaldehyde solution	70–71
Formamide	72
Formic acid	72–73
Fraser broth	233
Fraser listeria selective supplement	271
G	
D-(+)-Glucose	73
Glycerol	73–74
Glycerol (Propan-1,2,3-triol)	271
Glycine	74
H	
Half fraser broth	233
Half fraser listeria selective supplement	272
Heptane	75–76
Heptane-1-sulfonic acid sodium salt	76
n-Hexane	77–78
Hexafluoro-2-propanol	77
Hexane-1-sulfonic acid sodium salt	78
Hydrochloric acid	79–85
Hydrochloric acid volumetric solutions	177–180, 191–192
Hydrogen peroxide	85–86
I	
Imidazole	87
Indicator solutions	
- Bromocresol green-methyl red	198
- Fehling solution	198
- Ferroin solution	198
- Methyl orange solution	199
- Methyl red solution	199
- Phenolphthalein solution	199–200
- Starch solution	200
- Universal indicator solution	200
- Tashiro indicator	200
Iodide-iodate volumetric solution	192
Iodine solution	180
Iodine volumetric solution	192
Iron(II) chloride tetrahydrate	88
Iron(II) sulphate heptahydrate	89
Iron(III) chloride hexahydrate	87
Iron(III) nitrate nonahydrate	88
Isoamyl alcohol	89

Isobutanol	90
Isohexane	90
Isooctane	91–92
Isopropanol 70 Biocide	132
K	
Kanamycin esculin azide agar	234
Kjeldahl tablets	92–95
L	
Lactose broth	234–235
Lanthanum nitrate hexahydrate	95
Lauryl sulphate broth	235
LB agar	236
LB broth	237
Lead(II) acetate trihydrate	96
Lead(II) nitrate	96
Lead(II) nitrate solution	180
Legionella	
- BCYE agar	238
- BCYE growth supplement	272
- GVPC selective supplement	272
Listeria	
- Enrichment supplement	273
- Selective agar	238
- Selective supplement	273
Lithium hydroxide monohydrate	96
Lysine medium	239
M	
M17 agar	239
MacConkey agar	240
MacConkey broth	240
Magnesium acetate tetrahydrate	97
Magnesium chloride hexahydrate	97
Magnesium silicate (Florisil®)	97
Magnesium sulphate	98
Magnesium sulphate heptahydrate	98
Malt extract	278
Malt extract agar	241
Malt extract broth	241
Manganese(II) chloride tetrahydrate	98
Manganese(II) sulphate monohydrate	99
Mannitol salt agar	242
Maximum recovery diluent	242
Mercury sulphate solution	181
Mercury(II) acetate	99
Mercury(II) sulphate	100
Methanol	100–103
Methoxyethanol	103
N-Methyl-2-pyrrolidone	106–107
2-Methylbutane	104
Methyl ethyl ketone	105
Methyl isobutyl ketone	106
2-Methyltetrahydrofuran	107
Methylated spirit	63, 104
Methylcyclohexane	105
Mixture	
- Acetone/hydrochloric acid	108
- Ethyl acetate/cyclohexane	108
- Ethyl acetate/ethanol	108
Molecular sieve	109
MOPS (3-Morpholinopropanesulfonic acid)	109
MRS agar	243
MRS broth	244
MUG fluorescence supplement	273
MYP agar	244
N	
Nickel(II) chloride hexahydrate	110
Nickel(II) sulphate hexahydrate	110
Ninhydrin	110
Nitric acid	111–112
Nitric acid volumetric solution	192
Nutrient agar APHA, DEV and ISO	245–246
O	
Octane-1-sulfonic acid sodium salt	112
1-Octanol	113
Orange serum agar	246
Oxalic acid solution	181
Oxalic acid volumetric solution	193
Oxford agar selective supplement	274
Oxford listeria agar	247
P	
Palcam listeria agar	247
Palcam listeria agar selective supplement	274
Palladium matrix modifier	113
Paraffin	113
Paraffin oil	114
PBS buffer	208
n-Pentane	114–115
Pentane-1-sulfonic acid sodium salt	115
1-Pentanol	116
Pepsin liquid	116
Peptone from casein	278
Peptone Water	248–249
Perchloric acid in anhydrous acetic acid	181
Periodic acid	116
Petroleum benzine	117–118

pH	
- Buffer solutions	210–216
- Buffer tablets	216–217
- Indicator paper	218
- Indicator strips	217–218
Phenol	118
Phosphoric acid	119
Plate count agar	250
Plate count skim milk agar	250
Polyethylene glycol 400	120
Polymyxin B selective supplement	275
Potassium acetate	120
Potassium bromate	120
Potassium bromate volumetric solution	193
Potassium chloride	121
Potassium chromate solution	182
Potassium dichromate solution	182
Potassium dichromate volumetric solution	193
Potassium dihydrogen phosphate	121
Potassium disulphate	122
Potassium fluoride	122
Potassium hexacyanoferrate(II) trihydrate	123
Potassium hexacyanoferrate(III)	122
Potassium hydrogen carbonate	123
di-Potassium hydrogen phosphate	123
di-Potassium hydrogen phosphate trihydrate	124
Potassium hydrogen phthalate	124
Potassium hydrogen sulphate	124–125
Potassium hydroxide	125
Potassium hydroxide solution	126
Potassium hydroxide solution	182–183
Potassium hydroxide volumetric solutions	193–194
Potassium iodate	126–127
Potassium iodate volumetric solution	194
Potassium iodide	127
Potassium nitrate	128
di-Potassium oxalate monohydrate	128
Potassium permanganate	129
Potassium permanganate solution	184
Potassium permanganate volumetric solution	194
Potassium peroxodisulphate	129
Potassium sodium tartrate tetrahydrate	129
Potassium sulphate	130
Potassium thiocyanate	130
Potato dextrose agar	251
Propanol	
- 1-Propanol	131
- 2-Propanol	131–135
1,3-Propanediol	131
Propylene glycol	136
Proteinase	136
Pseudomonas agar	251
Pyridine	137
R	
R2A agar	252
D-Raffinose pentahydrate	137
Rappaport vassiliadis broth	253
Reinforced clostridial medium	253
Rubidium chloride	137
S	
Sabouraud dextrose agar	254–255
Sabouraud glucose broth	254
Sea sand	138
Silica gel	138
Silver nitrate	139
Silver nitrate solution	184
Silver nitrate volumetric solution	194
Silver sulphate	139
Silver sulphate solution	185
Slanetz and bartley agar	256
Sodium acetate	140
Sodium acetate trihydrate	140
Sodium azide	141
Sodium benzoate	141
Sodium borohydride	141
Sodium carbonate	142
Sodium carbonate decahydrate	142
Sodium chloride	143
Sodium chloride solution	185
Sodium dichloroisocyanurate	144
Sodium diethyldithiocarbamate trihydrate	144
Sodium dihydrogen phosphate dihydrate	145
Sodium dihydrogen phosphate monohydrate	145
Sodium dodecyl sulphate	146
Sodium fluoride	146
Sodium hydrogen carbonate	147
di-Sodium hydrogen phosphate	147
di-Sodium hydrogen phosphate dihydrate	147
di-Sodium hydrogen phosphate dodecahydrate	148
Sodium hydroxide	148–149
Sodium hydroxide solution	149–150, 185–187
Sodium hydroxide volumetric solutions	195
Sodium hypochlorite solution	151
Sodium iodide	151
Sodium molybdate dihydrate	151
Sodium nitrate	152

Sodium nitrite	152
Sodium nitroprusside dihydrate	153
Sodium peroxodisulphate	153
Sodium pyrophosphate decahydrate	154
Sodium salicylate	154
Sodium sulfite anyhdrous	155
Sodium sulphate	154–155
Sodium sulphate decahydrate	155
di-Sodium tartrate dihydrate	156
di-Sodium tetraborate decahydrate	156
Sodium thiosulphate	156
Sodium thiosulphate pentahydrate	157
Sodium thiosulphate solution	187–188
Sodium thiosulphate volumetric solutions	195–196
tri-Sodium citrate dihydrate	144
tri-Sodium phosphate dodecahydrate	153
Soy peptone, papain-digested	278
Standard 1 nutrient agar and broth	256–257
Sulphuric acid	157–160, 188
Sulphuric acid volumetric solutions	196
T	
Tergitol® 7-lactose-TTC agar	257
Terrific broth	258
Test strips for semi-quantitative determination	218
- Ascorbic acid test	218
- Combined test stripes 3 in 1	219
- Combined test stripes 5 in 1	219
- Nitrate test	218
- Nitrite test	218
- Peroxide test	218
- Phosphate test	219
- Total hardness test	218
Tetrachloroethylene	161
Tetrahydrofuran	161–162
Thioglycolat medium	258
Tin(II) chloride dihydrate	162
TISAB solutions for fluoride determination	163
Toluene	163–164
Triethylamine	165
Triple sugar iron agar	259
Tris	165
Tryptic soy agar	259–261
Tryptic soy broth	261
Tryptone from casein	279
Tryptone yeast extract agar	262
TSC agar	262
TTC solution	275
Tween® 20	165–166
U	
Uranine	166
V	
VRBD agar	264
VRBl agar	263
W	
Water	166–169
Water with formic acid	169
Water-plate-count-agar	262
Wijs solution	188
Wort agar	264
Wort broth	265
X	
XLD agar	265
Xylene	169–170
Xylene substitute	171
Y	
Yeast extract	279
YGC agar	266
2x YT agar	266
2x YT broth	267
Z	
Zinc acetate dihydrate	171
Zinc chloride	172
Zinc oxide	172
Zinc sulphate heptahydrate	173
Zinc sulphate solution	189
Zirconium(IV) oxide chloride octahydrate	173



CHEMICALS FROM A–Z

ABSORBENT

CHEMSOLUTE® SORB (ABSORBENT)

Quantity	Packaging Material	Art. no.
1000 ml	Plastic bottle	2410.0001
4000 ml	Plastic bottle	2440.0001
5 kg	Plastic canister	2450.0001

ACETIC ACID

- CH_3COOH
- M = 60.05 g/mol
- CAS-No. 64-19-7
- EC Index No. 607-002-00-6
- EC-No. 200-580-7
- Density ~1.05 g/ml
- UN-No. 2789
- ADR 8 (3), II

GHS

- H226 H314
- P210 P243 P260 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P308+P313 P403+P235 P501



Specification

- Clear, colourless liquid

ACETIC ACID P. A., ACS, ISO, PH. EUR. (MIN. 96.0 %)

Specification

- Non-volatile substances max. 0.0005 %
- Silver (Ag) max. 0.000001 %
- Aluminium (Al) max. 0.000005 %
- Arsenic (As) max. 0.000001 %
- Barium (Ba) max. 0.000001 %
- Beryllium (Be) max. 0.000001 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.00002 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000001 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000001 %
- Iron (Fe) max. 0.00001 %
- Germanium (Ge) max. 0.000005 %
- Potassium (K) max. 0.00001 %
- Lithium (Li) max. 0.000001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000001 %
- Molybdenum (Mo) max. 0.000002 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000002 %
- Strontium (Sr) max. 0.000001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Vanadium (V) max. 0.000001 %
- Zinc (Zn) max. 0.000005 %
- Zirconium (Zr) max. 0.00001 %
- Chloride (Cl) max. 0.00005 %
- Phosphate (PO_4) max. 0.00005 %
- Sulphate (SO_4) max. 0.00005 %
- Acetaldehyde (C_2H_4O) max. 0.0002 %
- Indifference against CrO_3 complies
- Reducing substances max. 0.002 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2296.2500

ACETIC ACID (GLACIAL) PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP, FCC (MIN. 99.5 %)

Specification

- Non-volatile substances max. 0.003 %
- Aluminium (Al) max. 0.00005 %
- Arsenic (As) max. 0.0002 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0002 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0002 %
- Sulphate (SO_4) max. 0.0005 %
- Reducing substances max. 0.01 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2268.2511

Chemical binder for more information ⟶ see page 288

ACETIC ACID (GLACIAL) P. A., REAG. PH. EUR., REAG. USP (MIN. 99.8 %)

Specification

- Assay (acidimetric) 99.5 – 100.5 %
- Identity complies
- Appearance of the solution clear
- Colour (APHA) max. 10
- Water miscibility complies
- Titrable base complies
- Substances reducing $KMnO_4$ complies
- Density (20 °C) 1.0501 – 1.0520
- Refractive index (20 °C) 1.3711 – 1.3730
- Boiling point 118.3 – 118.8 °C
- Freezing point 16 °C
- Residue on evaporation max. 10 ppm
- Formic acid (HCOOH) max. 0.05 %
- Acetic anhydride ($C_4H_6O_3$) max. 100 ppm
- Chloride (Cl) max. 1 ppm
- Carbonyl compounds (as CO) max. 50 ppm
- Phosphate (PO_4) max. 0.5 ppm
- Heavy metals (as Pb) max. 0.5 ppm
- Sulfate (SO_4) max. 0.5 ppm
- Silver (Ag) max. 0.02 ppm
- Aluminium (Al) max. 0.05 ppm
- Arsenic (As) max. 0.1 ppm
- Barium (Ba) max. 0.1 ppm
- Beryllium (Be) max. 0.02 ppm
- Bismuth (Bi) max. 0.02 ppm
- Calcium (Ca) max. 0.2 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.01 ppm
- Chromium (Cr) max. 0.03 ppm
- Copper (Cu) max. 0.01 ppm
- Iron (Fe) max. 0.2 ppm
- Potassium (K) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.01 ppm
- Molybdenum (Mo) max. 0.05 ppm
- Sodium (Na) max. 0.5 ppm
- Nickel (Ni) max. 0.03 ppm
- Lead (Pb) max. 0.02 ppm
- Strontium (Sr) max. 0.02 ppm
- Titanium (Ti) max. 0.1 ppm
- Thallium (Tl) max. 0.05 ppm
- Vanadium (V) max. 0.05 ppm
- Zinc (Zn) max. 0.05 ppm
- Zirconium (Zr) max. 0.1 ppm
- Water (KF) max. 1500 ppm
- Acetaldehyde (C_2H_4O) max. 500 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2290.1000
2.5 l	Glass bottle	2290.2500
30 kg	Plastic canister	2290.9030

ACETIC ACID (GLACIAL) SUPERPURE FOR TRACE ANALYSIS (MIN. 99.0 %)

Specification

- Colour (APHA) max. 10
- Chloride (Cl) max.1 ppm
- Platinium (Pt) max. 0.5 ppb
- Phosphate (PO_4) max. 1 ppm
- $KMnO_4$ red. substances complies
- Aluminium (Al) max. 1 ppb
- Antimony (Sb) max. 0.5 ppb
- Arsenic (As) max. 0.5 ppb
- Barium (Ba) max. 0.5 ppb
- Beryllium (Be) max. 0.5 ppb
- Bismut (Bi) max. 0.1 ppb
- Cadmium (Cd) max. 0.5 ppb
- Calcium (Ca) max. 1 ppb
- Cerium (Ce) max. 0.1 ppb
- Caesium (Cs) max. 0.1 ppb
- Chromium (Cr) max. 0.5 ppb
- Cobalt (Co) max. 0.1 ppb
- Copper (Cu) max. 0.5 ppb
- Dysprosium (Dy) max. 0.1 ppb
- Erbium (Er) max. 0.1 ppb
- Europium (Eu) max. 0.1 ppb
- Gadolinium (Gd) max. 0.1 ppb
- Gallium (Ga) max. 0.1 ppb
- Germanium (Ge) max. 0.5 ppb
- Hafnium (Hf) max. 0.1 ppb
- Holmium (Ho) max. 0.1 ppb
- Indium (In) max. 0.1 ppb
- Iron (Fe) max. 1 ppb
- Lanthanium (La) max. 0.1 ppb
- Lead (Pb) max. 0.1 ppb
- Lithium (Li) max. 0.1 ppb
- Lutetium (Lu) max. 0.1 ppb
- Manganese (Mn) max. 0.5 ppb
- Mercury (Hg) max. 1 ppb
- Molybdenum (Mo) max. 0.5 ppb
- Neodymium (Nd) max. 0.1 ppb
- Nickel (Ni) max. 0.5 ppb
- Potassium (K) max. 1 ppb
- Praseodymium (Pr) max. 0.1 ppb
- Rhenium (Re) max. 0.5 ppb
- Rhodium (Rh) max. 0.5 ppb
- Rubidium (Rb) max. 0.1 ppb
- Samarium (Sm) max. 0.1 ppb
- Scandium (Sc) max. 0.1 ppb
- Selenium (Se) max. 1 ppb
- Silver (Ag) max. 1 ppb
- Sodium (Na) max. 1 ppb
- Strontium (Sr) max. 0.5 ppb
- Tellurium (Te) max. 0.5 ppb
- Terbium (Tb) max. 0.1 ppb
- Thallium (Tl) max. 0.1 ppb
- Thorium (Th) max. 0.1 ppb
- Thulium (Tm) max. 0.1 ppb
- Tin (Sn) max. 0.5 ppb
- Titanium (Ti) max. 0.5 ppb
- Tungsten (W) max. 0.5 ppb
- Uranium (U) max. 0.1 ppb
- Vanadium (V) max. 0.5 ppb
- Ytterbium (Yb) max. 0.1 ppb
- Yttrium (Y) max. 0.1 ppb
- Zinc (Zn) max. 1 ppb
- Zirkonium (Zr) max. 0.1 ppb

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2272.1011

ACETIC ACID, DILUTED

- M = 60.05 g/mol
- Density 1.012 g/ml

Specification
- Clear, colourless liquid

ACETIC ACID PURE (10.0 – 11.0 % W/W)

- UN-No. 2790
- ADR 8, III

GHS
- H290 H315 H319
- P280 P301+P330+P331 P303+P361+P353 P305+P351+P338



Specification
- Assay 10.0 – 11.0 % w/w

Quantity	Packaging Material	Art. no.
10 l	Plastic canister	2249.9010

ACETIC ANHYDRIDE

- $C_4H_6O_3$
- CAS-No. 108-24-7
- EC Index No. 607-008-00-9
- EC-No. 203-564-8
- UN-No. 1715
- ADR 8 (3), II

GHS
- H226 H302+H332 H314 H335
- P210 P260 P280 P303+P361+P353 P305+P351+P338 P310 P403+P233 P501



Specification
- Clear liquid

ACETIC ANHYDRIDE FOR SYNTHESIS (MIN. 98 %)

Specification
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3856 – 1.3956
- Density (20 °C) 1.079 – 1.085 g/ml
- Residue on evaporation max. 100 ppm
- Substances reducing $KMnO_4$ max. 0.02 %
- Acetic acid (CH_3COOH) max. 0.5 %
- Chloride (Cl) max. 5 ppm
- Heavy metals (as Pb) max. 2 ppm
- Aluminium (Al) max. 1 ppm
- Iron (Fe) max. 1 ppm
- Identity complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2210.1000

ACETIC ANHYDRIDE P. A. (MIN. 98 %)

Specification
- Boiling point 136 – 142 °C
- Colour (APHA) max. 20
- Refractive index (20 °C) 1.3881 – 1.3931
- Density (20 °C) 1.080 – 1.084 g/ml
- Residue on evaporation max. 30 ppm
- Substances reducing $KMnO_4$ (ACS) complies
- Chloride (Cl) max. 5 ppm
- Phosphate (PO_4) max. 10 ppm
- Heavy metals (as Pb) max. 2 ppm
- Sulphate (SO_4) max. 5 ppm
- Iron (Fe) max. 5 ppm
- Identity complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2250.1000
2.5 l	Glass bottle	2250.2500

ACETONE

- CH_3COCH_3
- M = 58.08 g/mol
- CAS-No. 67-64-1
- EC Index No. 606-001-00-8
- EC-No. 200-662-2
- Density (20 °C) 0.788 – 0.793 g/ml
- UN-No. 1090
- ADR 3, II

GHS

- H225 H319 H336 EUH066
- P210 P240 P305+P351+P338 P403+P235 P501



Specification

- Clear, colourless liquid
- Melting point -94 – -95 °C
- Boiling point 55.6 – 56.7 °C

ACETONE REDIST. (MIN. 99.0 %)

Specification

- Water (KF) max. 1 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	3101.2500
5 l	Plastic canister	3101.5000

ACETONE PURE, TECHNICAL GRADE (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Free acid max. 0.005 %
- Heavy metals (as Pb) max. 0.0001 %
- Reducing substances max. 0.0002 %
- Residue on evaporation max. 0.001 %
- Aldehydes max. 0.002 %
- Methanol (CH_3OH) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2659.1000
2.5 l	Plastic bottle	2659.2511
5 l	Plastic canister	2659.5000
25 l	Metal drum	2659.6025
10 l	Plastic canister	2659.9010
25 l	Plastic canister	2659.9025

ACETONE FOR SYNTHESIS (MIN. 99.5 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.2 %
- Free acid max. 0.003 %
- Heavy metals (as Pb) max. 0.001 %
- Aldehydes max. 0.002 %
- Methanol (CH_3OH) max. 0.05 %
- Reducing substances max. 0.0002 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2677.2511

ACETONE FOR SYNTHESIS (MIN. 99.8 %)

Specification

- Colour (APHA) max. 10
- Identity (IR) complies
- Refractive index (20 °C) 1.3581 – 1.3601
- Water (KF) max. 0.25 % w/w
- Acidity (as CH_3COOH) max. 200 ppm
- Residue on evaporation max. 15 ppm
- Diacetyl ($C_4H_6O_2$) max. 500 ppm
- Water miscibility complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2666.1000
5 l	Plastic canister	2666.5000

ACETONE PURE, PH. EUR. (MIN. 99.0 %)

Specification

- Substances insoluble in water complies
- Acidity or alkalinity complies
- 2-Propanol (C_3H_7OH) max. 0.05 % v/v
- Reducing substances complies
- Methanol (CH_3OH) max. 0.05 % v/v
- Residue on evaporation max. 50 ppm
- Benzene (C_6H_6) max. 2 ppm
- Water max. 0.3 %
- Related substances max. 0.05 % v/v

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2693.2511
5 l	Plastic canister	2693.5000
10 l	Plastic canister	2693.9010

ACETONE PURISS. (MIN. 99.8 %)

Specification

- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3581 – 1.3601
- Water (KF) max. 0.25 % w/w
- Acidity (as CH_3COOH) max. 200 ppm
- Residue on evaporation max. 15 ppm
- Diacetyl ($C_4H_6O_2$) max. 500 ppm

Quantity	Packaging Material	Art. no.
200 l	Metal drum	2698.9200

ACETONE PURISS., PH. EUR., BP (MIN. 99.5 %)

Specification

- Assay (GC, on anhydrous basis) 99.5 – 100.0 %
- Identity A, B, C complies
- Appearance of the solution complies
- Acidity or alkalinity complies
- Reducing substances complies
- Relative density 0.790 – 0.793
- Residue on evaporation max. 0.005 % w/w
- Water (KF) max. 0.3 % w/w
- Related substances complies
- Methanol (CH_3OH) max. 0.05 %
- 2-Propanol (C_3H_7OH) max. 0.05 %
- Benzene (C_6H_6) max. 0.0002 % v/v
- Other impurities max. 0.05 %
- Chromium (Cr) max. 0.1 ppm
- Copper (Cu) max. 0.1 ppm
- Iron (Fe) max. 0.1 ppm
- Iridium (Ir) max. 0.1 ppm
- Manganese (Mn) max. 0.1 ppm
- Molybdenum (Mo) max. 0.1 ppm
- Nickel (Ni) max. 0.1 ppm
- Osmium (Os) max. 0.1 ppm
- Palladium (Pd) max. 0.1 ppm
- Platinum (Pt) max. 0.1 ppm
- Rhodium (Rh) max. 0.1 ppm
- Ruthenium (Ru) max. 0.1 ppm
- Vanadium (V) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm
- Miscibility with water, alcohol, ether complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2647.1000
2.5 l	Glass bottle	2647.2500
5 l	Plastic canister	2647.5000
25 l	Metal drum	2647.9025

ACETONE P. A., ACS, PH. EUR., BP, USP (MIN. 99.5 %)

Specification

- Assay (GC, on anhydrous basis) 99.5 – 100.0 %
- Identity (IR) complies
- Appearance of the solution complies
- Insoluble matter in water complies
- Acidity or alkalinity complies
- Relative density 0.790 – 0.793
- Reducing substances complies
- Oxidizing substances complies
- Related substances complies
- Ethanol (C_2H_5OH) max. 0.05 %
- Methanol (CH_3OH) max. 0.05 %
- 2-Propanol (C_3H_7OH) max. 0.05 %
- Benzene (C_6H_6) max. 0.0002 % v/v
- Water (KF) max. 0.3 % w/w
- Residue on evaporation max. 0.004 % w/w
- Other impurities max. 0.05 %
- Chromium (Cr) max. 0.1 ppm
- Copper (Cu) max. 0.1 ppm
- Iron (Fe) max. 0.1 pmm
- Iridium (Ir) max. 0.1 ppm
- Manganese (Mn) max. 0.1 ppm
- Molybdenum (Mo) max. 0.1 ppm
- Nickel (Ni) max. 0.1 ppm
- Osmium (Os) max. 0.1 ppm
- Palladium (Pd) max. 0.1 ppm
- Platinum (Pt) max. 0.1 ppm
- Rhodium (Rh) max. 0.1 ppm
- Ruthenium (Ru) max. 0.1 ppm
- Vanadium (V) max. 0.1 ppm
- Zinc (Zn) max. 0.1 pmm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2654.1000
2.5 l	Glass bottle	2654.2500
5 l	Plastic bottle	2654.5000
5 l	Plastic canister	2654.5010
25 l	Metal drum	2654.9025

ACETONE P. A., ACS, ISO, REAG. PH. EUR., REAG. USP (MIN. 99.8 %)

Specification

- Assay (GC) min. 99.8 %
- Appearance of solution clear
- Colour (APHA) max. 10
- Identity (IR) complies
- Water solubility complies
- Related substances (GC) complies
- Density (20 °C) 0.790 – 0.792
- Refractive index (20 °C) 1.3581 – 1.3601
- Boiling point 55.8 – 56.3 °C
- Water (KF) max. 0.2 %
- Residue on evaporation max. 10 ppm
- Acidity max. 0.0003 meq/g
- Alkalinity max. 0.0006 meq/g
- Ethanol (C_2H_5OH) max. 100 ppm
- 2-Propanol (C_3H_7OH) max. 500 ppm
- Methanol (CH_3OH) max. 500 ppm
- Aldehydes max. 10 ppm
- Heavy metals (as Pb) max. 0.2 ppm
- Subst. reducing $KMnO_4$ max. 2 ppm
- Aluminium (Al) max. 0.5 ppm
- Boron (B) max. 0.1 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.05 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.01 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.02 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.01 ppm
- Lead (Pb) max. 0.01 ppm
- Zinc (Zn) max. 0.2 ppm
- Benzene (C_6H_6) max. 2 ppm
- Diacetyl ($C_4H_6O_2$) max. 500 ppm

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2680.5000
200 l	Metal drum	2680.9200

ACETONE FOR HPLC (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.357 – 1.361
- Water (KF) max. 500 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- UV transmittance at 330 nm min. 10.0 %
- UV transmittance at 335 nm min. 40.0 %
- UV transmittance at 340 nm min. 75.0 %
- UV transmittance at 345 nm min. 90.0 %
- UV transmittance at 350 nm min. 98.0 %
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2626.1000
2.5 l	Glass bottle	2626.2500
4 l	Glass bottle	2626.4000

ACETONE FOR RESIDUE ANALYSIS (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.357 – 1.361
- Water (KF) max. 500 mg/kg
- Non-volatile substances max. 2 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- GC-ECD: Peak (lindane) (Retention range trichlorobenzene to mirex) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2661.1000
2.5 l	Glass bottle	2661.2500
4 l	Glass bottle	2661.4000

ACETONE FOR PESTICIDE ANALYSIS (MIN. 99.8 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.357 – 1.361
- Water max. 0.05 %
- Non-volatile substances max. 2 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2676.2500

ACETONE MOS (99.8 – 100.0 %)

Specification

- Assay (GC, on anhydrous basis) 99.8 – 100.0 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.0005 % w/w
- Water (KF) max. 0.3 % w/w
- Acidity (as CH_3COOH) max. 0.002 %
- Alkalinity (as NH_3) max. 0.001 %
- Methanol (CH_3OH) max. 0.05 %
- 2-Propanol (C_3H_7OH) max. 0.05 %
- Chloride (Cl) max. 0.2 ppm
- Phosphate (PO_4) max. 0.05 ppm
- Heavy metals (as Pb) max. 0.5 ppm
- Dilution test complies
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 50 ppb
- Arsenic (As) max. 5 ppb
- Gold (Au) max. 20 ppb
- Boron (B) max. 10 ppb
- Barium (Ba) max. 20 ppb
- Beryllium (Be) max. 10 ppb
- Bismuth (Bi) max. 20 ppb
- Calcium (Ca) max. 25 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 20 ppb
- Gallium (Ga) max. 10 ppb
- Germanium (Ge) max. 10 ppb
- Potassium (K) max. 25 ppb
- Lithium (Li) max. 10 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 10 ppb
- Sodium (Na) max. 25 ppb
- Niobium (Nb) max. 30 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max. 10 ppb
- Antimony (Sb) max. 10 ppb
- Silicon (Si) max. 30 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 10 ppb
- Tantalum (Ta) max. 30 ppb
- Titanium (Ti) max. 10 ppb
- Thallium (Tl) max. 10 ppb
- Vanadium (V) max. 10 ppb
- Zinc (Zn) max. 20 ppb
- Zirconium (Zr) max. 10 ppb
- Particle count > 0.5 µm max. 100 P/ml
- Particle count > 1.0 µm max. 8 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2670.2500
5 l	Plastic bottle	2670.5000

ACETONE VLSI (99.8 – 100.0 %)

Specification

- Assay (GC, on anhydrous basis) 99.8 – 100.0 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.0003 % w/w
- Water (KF) max. 0.3 % w/w
- Acidity (as CH_3COOH) max. 0.002 %
- Alkalinity (as NH_3) max. 0.001 %
- Chloride (Cl) max. 0.2 ppm
- Phosphate (PO_4) max. 0.05 ppm
- Aluminium (Al) max. 30 ppb
- Arsenic (As) max. 5 ppb
- Gold (Au) max. 20 ppb
- Boron (B) max. 10 ppb
- Barium (Ba) max. 20 ppb
- Beryllium (Be) max. 10 ppb
- Bismuth (Bi) max. 10 ppb
- Calcium (Ca) max. 25 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 20 ppb
- Gallium (Ga) max. 10 ppb
- Potassium (K) max. 20 ppb
- Lithium (Li) max. 10 ppb
- Magnesium (Mg) max. 10 ppb
- Manganese (Mn) max. 10 ppb
- Molybdenum (Mo) max. 10 ppb
- Sodium (Na) max. 20 ppb
- Niobium (Nb) max. 20 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max. 10 ppb
- Antimony (Sb) max. 5 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 10 ppb
- Tantalum (Ta) max. 20 ppb
- Titanium (Ti) max. 10 ppb
- Thallium (Tl) max. 10 ppb
- Vanadium (V) max. 10 ppb
- Zinc (Zn) max. 20 ppb
- Zirconium (Zr) max. 10 ppb
- Particle count > 0.5 µm max. 80 P/ml
- Particle count > 1.0 µm max. 8 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
5 l	Plastic bottle	2632.5000

ACETONITRILE

- CH_3CN
- M = 41.05 g/mol
- CAS-No. 75-05-8
- EC Index No. 608-001-00-3
- EC-No. 200-835-2
- Density (20 °C) 0.781 – 0.786 g/ml
- UN-No. 1648
- ADR 3, II

GHS

- H225 H302+H312+H332 H319
- P210 P241 P261 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Clear, colourless liquid
- Melting point -45 – -46 °C
- Boiling point 80 – 82.5 °C

ACETONITRILE FOR SYNTHESIS (MIN. 99.5 %)

Specification

- Water max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2641.1000

ACETONITRILE P. A. (MIN. 99.8 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3410 – 1.3450
- Water (KF) max. 500 ppm
- Colour (APHA) max. 10
- Acidity max. 8 µeq/g
- Alkalinity max. 0.6 µeq/g
- Residue on evaporation max. 10 ppm
- Calcium (Ca) max. 0.05 ppm
- Copper (Cu) max. 0.05 ppm
- Iron (Fe) max. 0.2 ppm
- Potassium (K) max. 0.05 ppm
- Magnesium (Mg) max. 0.05 ppm
- Sodium (Na) max. 1 ppm
- Lead (Pb) max. 0.05 ppm
- Zinc (Zn) max. 0.5 ppm
- Litmus paper test conform

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2649.2500
200 l	Metal drum	2649.9200

ACETONITRILE FOR HPLC (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.342 – 1.346
- Water (KF) max. 300 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- UV transmittance at 197 nm min. 82.0 %
- UV transmittance at 200 nm min. 85.0 %
- UV transmittance at 210 nm min. 90.0 %
- UV transmittance at 220 nm min. 94.0 %
- UV transmittance at 230 nm min. 97.0 %
- UV transmittance at 240 nm min. 98.0 %
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Colour (APHA) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2637.1000
2.5 l	Glass bottle	2637.2500

ACETONITRILE ISOCRATIC FOR HPLC (MIN. 99.9 %)

Specification

- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3420 – 1.3440
- Acidity or alkalinity max. 0.0008 meq/g
- Water (KF) max. 300 ppm
- Residue on evaporation max. 5 ppm
- UV transmittance at 230 nm min. 50.0 %
- UV transmittance at 250 nm min. 98.0 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2692.5000

ACETONITRILE GRADIENT GRADE FOR HPLC (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.342 – 1.346
- Water (KF) max. 300 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- HPLC gradient (peak) at 210 nm max. 5 mAU
- HPLC gradient (peak) at 254 nm max. 0.8 mAU
- UV transmittance at 197 nm min. 82.0 %
- UV transmittance at 200 nm min. 90.0 %
- UV transmittance at 210 nm min. 94.0 %
- UV transmittance at 220 nm min. 96.0 %
- UV transmittance at 230 nm min. 98.0 %
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2653.1000
2.5 l	Glass bottle	2653.2500

ACETONITRILE ULTRAGRADIENT GRADE FOR HPLC (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.342 – 1.346
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 2 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- HPLC gradient test complies
- HPLC gradient (peak) at 210 nm max. 2 mAU
- HPLC gradient (peak) at 254 nm max. 0.5 mAU
- UV transmittance at 197 nm min. 85.0 %
- UV transmittance at 200 nm min. 92.0 %
- UV transmittance at 210 nm min. 95.0 %
- UV transmittance at 220 nm min. 98.0 %
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Gradient baseline drift at 210 nm max. 12 mAU
- UV cut off max. 190 nm
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2685.1000
2.5 l	Glass bottle	2685.2500

ACETONITRILE FOR LC-MS (MIN. 99.95 %)

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.342 – 1.346
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 2 mg/kg
- Free acid max. 0.0005 meq/g
- Free alkali max. 0.0002 meq/g
- UV transmittance at 195 nm min. 80.0 %
- UV transmittance at 200 nm min. 95.0 %
- UV transmittance at 220 nm min. 98.0 %
- UV transmittance at 230 nm min. 99.0 %
- UV cut off max. 190 nm
- HPLC gradient test complies
- HPLC gradient (peak) at 210 nm max. 1 mAU
- HPLC gradient (peak) at 254 nm max. 0.2 mAU
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Fluorescence (as quinine) at 365 nm max. 0.5 ppb
- Aluminium (Al) max. 0.000005 %
- Iron (Fe) max. 0.000005 %
- Sodium (Na) max. 0.000005 %
- Calcium (Ca) max. 0.000005 %
- Magnesium (Mg) max. 0.000005 %
- Potassium (K) max. 0.000005 %
- Sensitive impurities (reserpine) max. 100 ppb
- Colour (Hazen) max. 10
- Filtered through 0.1 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2697.1000
2.5 l	Glass bottle	2697.2500

ACETONITRILE FOR UHPLC-MS (99.97 – 100.0 %)

Specification

- Assay (GC, on anhydrous basis) 99.97 – 100.0 %
- Water (KF) max. 0.01 % w/w
- Residue on evaporation max. 0.0001 % w/w
- UHPLC-MS suitability test (reserpine) max. 5 ppb
- Absorption at 190 nm max. 1.00 AU
- Absorption at 195 nm max. 0.07 AU
- Absorption at 200 nm max. 0.02 AU
- Absorption at 205 nm max. 0.01 AU
- Absorption at 210 nm max. 0.01 AU
- Absorption at 220 nm max. 0.008 AU
- Absorption at 254 nm max. 0.005 AU
- Fluorescence (as quinine) at 254 nm max. 0.30 ppb
- Fluorescence (as quinine) at 365 nm max. 0.30 ppb
- Gradient test at 210 nm max. 1 mAU
- Gradient test at 254 nm max. 0.5 mAU
- Acidity max. 0.0002 meq/g
- Alkalinity max. 0.0001 meq/g
- Aluminium (Al) max. 20 ppb
- Calcium (Ca) max. 50 ppb
- Iron (Fe) max. 20 ppb
- Potassium (K) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Sodium (Na) max. 100 ppb
- Lead (Pb) max. 20 ppb
- Filtered through 0.1 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2690.1000
2.5 l	Glass bottle	2690.2500

ACETONITRILE WITH FORMIC ACID

- Density 0.786 g/ml
- UN-No. 1993
- ADR 3, II

GHS

- H225 H302+H312+H332 H319
- P210 P241 P264 P303+P361+P353 P304+P340 P305+P351+P338 P403+P235 P501



Specification

- Clear, colourless liquid

ACETONITRILE WITH 0.1 % FORMIC ACID FOR LC-MS (MIN. 99.5 %)

Specification

- Colour (APHA) max. 10
- Acidity (as HCOOH) 0.095 – 0.105 %
- HPLC gradient (peak) at 254 nm max. 50 mAU
- UV transmittance at 210 nm min. 5.0 %
- UV transmittance at 230 nm min. 15.0 %
- UV transmittance at 254 nm min. 90.0 %
- Aluminium (Al) max. 0.5 ppm
- Iron (Fe) max. 0.5 ppm
- Calcium (Ca) max. 0.5 ppm
- Magnesium (Mg) max. 0.5 ppm
- Sodium (Na) max. 2 ppm
- Potassium (K) max. 0.5 ppm
- Sensitive impurities (reserpine) max. 50 ppb

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2645.2500

ACETYLACETONE

- $C_5H_8O_2$
- M = 100.13 g/mol
- CAS-No. 123-54-6
- EC Index No. 606-029-00-0
- EC-No. 204-634-0
- Density (20 °C) 0.97 g/ml
- UN-No. 2310
- ADR 3 (6.1), III

GHS

- H226 H302 H311
- P210 P243 P280 P301+P312 P303+P361+P353 P403+P233 P501



Specification

- Colourless liquid
- Melting point -23 °C
- Boiling point 139 °C

ACETYLACETONE FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Assay (GC, area) min. 99.0 %
- Identity (IR) complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2606.1000

AGAROSE

Specification

- White fine homogenous powder

AGAROSE LOW ELECTROENDOSMOSIS (EEO)

Specification

- Gel strength (1 %) min. 1200 g/cm²
- Gel strength (1.5 %) min. 2500 g/cm²
- Clarity (1.5 %) max. 3 NTU
- Gelling temperature (1.5 %) 36 ±1.5 °C
- Melting point (1.5 %) 88 ±1.5 °C
- EEO 0.05 – 0.13
- Ash max. 0.4 %
- Moisture max. 10 %
- Sulphate (SO_4) max. 0.1 %
- Particle size over sieve 60 1.45 %
- Particle size over sieve 100 26.45 %
- Particle size over sieve 140 30.35 %
- Particle size over sieve 200 21.80 %
- Particle size under sieve 200 20.95 %
- pH (1.5 % solution) 6.65
- pH (1.5 % gel) 6.82
- Colorimetry (Absorbance) 450 nm 1.5 % 0.024
- DNase, RNase not detectable
- Comparative assay of different size DNA fragments passes test
- Background fluorescence assay in ethidium bromide passes test

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9953.0500

AGAROSE STANDARD, FOR ELECTROPHORESIS ROUTINE APPLICATIONS

Specification

- Gel strength (1 %) min. 1000 g/cm²
- Gel strength (1.5 %) min. 2000 g/cm²
- Clarity (1.5 %) max. 4 NTU
- Gelling temperature (1.5 %) 36 ±1.5 °C
- Melting point (1.5 %) 88 ±1.5 °C
- EEO 0.14 – 0.16
- Ash max. 0.45 %
- Moisture max. 10 %
- Sulphate (SO_4) max. 0.15 %
- Particle size over sieve 60 1.45 %
- Particle size over sieve 100 26.45 %
- Particle size over sieve 140 30.35 %
- Particle size over sieve 200 21.80 %
- Particle size under sieve 200 20.95 %
- pH (1.5 % solution) 6.65
- pH (1.5 % gel) 6.82
- Colorimetry (Absorbance) 450 nm 1.5 % 0.024
- DNase, RNase not detectable
- Comparative assay of different size DNA fragments passes test
- Background fluorescence assay in ethidium bromide passes test

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9920.0500

ALUMINIUM POTASSIUM SULPHATE DODECAHYDRATE

- $KAl(SO_4)_2 \times 12\ H_2O$
- M = 474.39 g/mol
- CAS-No. 7784-24-9
- EC-No. 233-141-3
- Density 1.75 g/ml

Specification

- Colourless powder
- Melting point 92.5 °C

ALUMINIUM POTASSIUM SULPHATE DODECAHYDRATE P. A., ACS, PH. EUR. (MIN. 99.5 %)

Specification

- Ammonium (NH_4) max. 0.005 %
- Arsenic (As) max. 0.0002 %
- Iron (Fe) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Sodium (Na) max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2620.1000

AMMONIUM ACETATE

- $(NH_4)CH_3COO$
- M = 77.08 g/mol
- CAS-No. 631-61-8
- EC-No. 211-162-9
- Density (20 °C) 1.17 g/ml

Specification

- Colourless solid
- Melting point 114 °C

AMMONIUM ACETATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0002 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0002 %
- Magnesium (Mg) max. 0.0002 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0002 %
- Chloride (Cl) max. 0.0005 %
- Nitrate (NO_3) max. 0.001 %
- Sulphate (SO_4) max. 0.001 %
- Residue on ignition max. 0.01 %
- pH (5 %, 25 °C) 6.5 – 7.5
- Sulphated ash max. 0.01 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2605.1000

AMMONIUM CERIUM(IV) NITRATE

- $CeH_8N_8O_{18}$
- M = 548.26 g/mol
- CAS-No. 16774-21-3
- EC-No. 240-827-6
- Density (20 °C) 2.50 g/ml
- UN-No. 3085
- ADR 5.1 (8), II

GHS

- H272 H290 H302 H314 H317 H410
- P210 P260 P273 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P390 P501



Specification

- Orange, crystalline solid
- Melting point > 200 °C (decomposition)

AMMONIUM CERIUM(IV) NITRATE (MIN. 98.0 %)

Specification

- Residual moisture max. 2 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2699.0500

AMMONIUM CHLORIDE

- $(NH_4)Cl$
- M = 53.49 g/mol
- CAS-No. 12125-02-9
- EC Index No. 017-014-00-8
- EC-No. 235-186-4
- Density (20 °C) 1.53 g/ml

GHS

- H302 H319
- P264 P270 P280 P301+P312 P305+P351+P338 P337+P313 P501



Specification

- Colourless powder
- Melting point 335 °C

AMMONIUM CHLORIDE P. A., ACS, ISO, PH. EUR. (MIN. 99.8 %)

Specification

- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.0005 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0002 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.005 %
- Nickel (Ni) max. 0.0001 %
- Lead (Pb) max. 0.0001 %
- Zinc (Zn) max. 0.0002 %
- Nitrate (NO_3) max. 0.0005 %
- Phosphate (PO_4) max. 0.0002 %
- Sulphate (SO_4) max. 0.002 %
- pH (5 %, 25 °C) 4.5 – 5.5
- Residue on ignition (650 °C) max. 0.01 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2668.1000

AMMONIUMCHLORIDE P. A., PH. EUR., USP, BP (MIN. 99.5 %)

Specification

- Identity complies
- Assay 99.5 – 100.5 %
- Appearance of solution complies
- loss on drying max. 0.5 %
- Acidic or alkaline substances complies
- Bromide (Br) and Iodide (I) complies
- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.002 %
- Thiocyanate (SCN) complies
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Magnesium (Mg) max. 0.005 %
- Nickel (Ni) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- pH (5 % solution) 4.6 – 6.0
- heavy metals (as Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2689.1000

AMMONIUM DIHYDROGEN PHOSPHATE

- $(NH_4)H_2PO_4$
- M = 115.03 g/mol
- CAS-No. 7722-76-1
- EC-No. 231-764-5
- Density (20 °C) 1.80 g/ml

Specification

- Colourless solid
- Melting point 190 °C (decomposition)

AMMONIUM DIHYDROGEN PHOSPHATE P. A., ACS (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Nitrate (NO_3) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Sodium (Na) max. 0.005 %
- pH (5 %, 25 °C) 3.8 – 4.4

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2651.0500

AMMONIUM HEPTAMOLYBDATE TETRAHYDRATE

- $(NH_4)_6Mo_7O_{24}$ x 4 H_2O
- M = 1235.86 g/mol
- CAS-No. 12054-85-2
- EC-No. 234-722-4
- Density (20 °C) 2.498 g/ml

Specification

- Colourless solid
- Melting point 90 °C (decomposition)

AMMONIUM HEPTAMOLYBDATE TETRAHYDRATE P. A., PH. EUR., ISO (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Nitrate (NO_3) max. 0.002 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.001 %
- Magnesium (Mg) max. 0.02 %
- Silicate (SiO_2) max. 0.001 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	2618.0250
1 kg	Plastic bottle	2618.1000
25 kg	Fibre drum	2618.9025

AMMONIUM HYDROGEN CARBONATE

- $(NH_4)HCO_3$
- M = 79.06 g/mol
- CAS-No. 1066-33-7
- EC-No. 213-911-5
- Density (20 °C) 1.59 g/ml

GHS
- H302
- P270 P301+P312 P501

Warning



Specification
- Colourless solid
- Melting point 105 °C

AMMONIUM HYDROGEN CARBONATE P. A., BP (MIN. 99.8 %)

Specification
- Residue on ignition max. 0.005 %
- Arsenic (As) max. 0.0003 %
- Iron (Fe) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Copper (Cu) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %

Quantity	Packaging Material	Art. no.
5 kg	Plastic bottle	2622.5000

DI-AMMONIUM HYDROGEN PHOSPHATE

- $(NH_4)_2HPO_4$
- M = 132.06 g/mol
- CAS-No. 7783-28-0
- EC-No. 231-987-8
- Density (20 °C) 1.62 g/ml

Specification
- Colourless solid
- Melting point 155 °C (decomposition)

DI-AMMONIUM HYDROGEN PHOSPHATE P. A., ACS (MIN. 99.0 %)

Specification
- Insoluble matter max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Nitrate (NO_3) max. 0.001 %
- Sulphate (SO_4) max. 0.004 %
- Heavy metals (as Pb) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.001 %
- Sodium (Na) max. 0.001 %
- pH (5 %, 25 °C) 7.7 – 8.1
- Calcium (Ca) max. 0.001 %
- Magnesium (Mg) max. 0.0005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2655.0500

AMMONIUM IRON(II) SULPHATE HEXAHYDRATE

- $(NH_4)_2Fe(SO_4)_2 \times 6\ H_2O$
- M = 392.14 g/mol
- CAS-No. 7783-85-9
- EC-No. 233-151-8
- Density (20 °C) 1.86 g/ml

Specification
- Greenish powder
- Melting point 100 °C

AMMONIUM IRON(II) SULPHATE HEXAHYDRATE P. A., ISO, PH. EUR. (99.0 – 101.0 %)

Specification
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.002 %
- Iron (Fe(III)) max. 0.01 %
- Calcium (Ca) max. 0.01 %
- Copper (Cu) max. 0.002 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.01 %
- Manganese (Mn) max. 0.01 %
- Sodium (Na) max. 0.01 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.003 %
- Insoluble matter max. 0.01 %
- pH (5 % solution) 3.0 – 5.0

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2678.1000

AMMONIUM NITRATE

- $(NH_4)NO_3$
- M = 80.04 g/mol
- CAS-No. 6484-52-2
- EC-No. 229-347-8
- Density 1.72 g/ml
- UN-No. 1942
- ADR 5.1, III

GHS
- H272
- P210 P501

Danger

Specification
- Colourless solid
- Melting point 169 °C
- Boiling point 302 °C

AMMONIUM NITRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification
- Assay (on anhydrous basis) min. 99 %
- Insoluble matter max. 0.005 %
- Chloride (Cl) max. 0.0003 %
- Nitrite (NO_2) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- Calcium (Ca) max. 0.003 %
- Magnesium (Mg) max. 0.002 %
- Iron (Fe) max. 0.0002 %
- Residue on ignition max. 0.01 %
- Water max. 5.0 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- Sulphated ash max. 0.01 %
- pH (5 %, 25 °C) 4.5 – 6.0

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2667.1000

AMMONIUM PEROXODISULPHATE

- $(NH_4)_2S_2O_8$
- M = 228.20 g/mol
- CAS-No. 7727-54-0
- EC Index No. 016-060-00-6
- EC-No. 231-786-5
- Density 1.98 g/ml
- UN-No. 1444
- ADR 5.1, III

GHS
- H272 H302 H315 H317 H319 H334 H335
- P210 P221 P280 P305+P351+P338 P405 P501

Danger







Specification
- Colourless solid
- Melting point 120 °C (decomposition)

AMMONIUM PEROXODISULPHATE P. A., ACS, PH. EUR. (MIN. 98.0 %)

Specification
- Free acid max. 0.04 meq/g
- Chloride (Cl) max. 0.0005 %
- Heavy metals (as Pb) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Manganese (Mn) max. 0.00005 %
- Residue on ignition max. 0.05 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2609.0500
1 kg	Plastic bottle	2609.1000
5 kg	Plastic bottle	2609.5000









AMMONIA SOLUTION

- CAS-No. 1336-21-6
- EC Index No. 007-001-01-2
- EC-No. 215-647-6
- Density (20 °C) 0.89 g/ml
- UN-No. 2672
- ADR 8, III

GHS

- H314 H335 H400
- P260 P271 P273 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P391 P405 P501



Specification

- Colourless liquid
- Melting point -57 °C
- Boiling point 38 °C

AMMONIA SOLUTION 25 % W/W P. A., ISO, PH. EUR. (±250 G NH_3/KG)

Specification

- Assay (as NH_3) min. 25 %
- Non-volatile substances max. 0.002 %
- Silver (Ag) max. 0.000002 %
- Gold (Au) max. 0.00001 %
- Barium (Ba) max. 0.00001 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.0001 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.00001 %
- Chromium (Cr) max. 0.000005 %
- Copper (Cu) max. 0.00001 %
- Iron (Fe) max. 0.00001 %
- Gallium (Ga) max. 0.000002 %
- Indium (In) max. 0.000002 %
- Potassium (K) max. 0.0001 %
- Lithium (Li) max. 0.000002 %
- Magnesium (Mg) max. 0.00005 %
- Manganese (Mn) max. 0.00001 %
- Molybdenum (Mo) max. 0.00001 %
- Sodium (Na) max. 0.0001 %
- Nickel (Ni) max. 0.000005 %
- Lead (Pb) max. 0.000005 %
- Platinum (Pt) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Strontium (Sr) max. 0.0001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Zinc (Zn) max. 0.00001 %
- Carbonate (CO_3) max. 0.001 %
- Chloride (Cl) max. 0.00005 %
- Phosphate (PO_4) max. 0.00005 %
- Sulphate (SO_4) max. 0.0002 %
- Reducing substances max. 0.0005 %
- Residue on evaporation max. 0.002 %
- Silicate (SiO_2) max. 0.001 %
- Appearance of solultion clear, colourless
- Density 0.892 – 0.910 g/ml
- Oxidizing substances complies
- Pyridine and related substances complies
- Identity B complies
- Identity C complies
- Solubility complies

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2672.1011
2.5 l	Plastic bottle	2672.2511
5 l	Plastic canister	2672.5000
25 l	Plastic canister	2672.9025

AMMONIA SOLUTION 27.5 % W/W P. A., ISO, PH. EUR. (275 G NH_3/KG)

Specification

- Non-volatile substances max. 0.002 %
- Silver (Ag) max. 0.000002 %
- Gold (Au) max. 0.00001 %
- Barium (Ba) max. 0.00001 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.0001 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.00001 %
- Chromium (Cr) max. 0.000005 %
- Copper (Cu) max. 0.00001 %
- Iron (Fe) max. 0.00001 %
- Gallium (Ga) max. 0.000002 %
- Indium (In) max. 0.000002 %
- Potassium (K) max. 0.0001 %
- Lithium (Li) max. 0.000002 %
- Magnesium (Mg) max. 0.00005 %
- Manganese (Mn) max. 0.00001 %
- Molybdenum (Mo) max. 0.00001 %
- Sodium (Na) max. 0.0001 %
- Nickel (Ni) max. 0.000005 %
- Lead (Pb) max. 0.000005 %
- Platinum (Pt) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Strontium (Sr) max. 0.0001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Zinc (Zn) max. 0.00001 %
- Carbonate (CO_3) max. 0.001 %
- Chloride (Cl) max. 0.00005 %
- Phosphate (PO_4) max. 0.00005 %
- Sulphate (SO_4) max. 0.0002 %
- Sulphur (S) max. 0.0002 %
- Residue on evaporation max. 0.002 %
- Silicate (SiO_2) max. 0.001 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2679.5000

AMMONIA SOLUTION 30 – 33 % W/W P. A., ACS, PH. EUR. (300 – 330 G NH_3/KG)

Specification

- Non-volatile substances max. 0.002 %
- Silver (Ag) max. 0.000002 %
- Gold (Au) max. 0.00001 %
- Barium (Ba) max. 0.00005 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.00005 %
- Chromium (Cr) max. 0.000005 %
- Copper (Cu) max. 0.00001 %
- Iron (Fe) max. 0.00001 %
- Gallium (Ga) max. 0.000002 %
- Indium (In) max. 0.000002 %
- Potassium (K) max. 0.00005 %
- Lithium (Li) max. 0.000002 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000005 %
- Molybdenum (Mo) max. 0.000005 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.000005 %
- Lead (Pb) max. 0.000005 %
- Platinum (Pt) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Strontium (Sr) max. 0.00001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Zinc (Zn) max. 0.00001 %
- Carbonate (CO_3) max. 0.001 %
- Chloride (Cl) max. 0.0003 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.0002 %
- Sulfur (S) max. 0.00002 %
- Silicate (SiO_2) max. 0.0005 %
- Reducing substances max. 0.0005 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2683.2500

AMMONIUM SULPHATE

- $(NH_4)_2SO_4$
- M = 132.14 g/mol
- CAS-No. 7783-20-2
- EC-No. 231-984-1
- Density 1.77 g/ml

Specification

- Colourless solid
- Melting point 235 °C

AMMONIUM SULPHATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.001 %
- Chloride (Cl) max. 0.0003 %
- Nitrate (NO_3) max. 0.001 %
- Phosphate (PO_4) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Arsenic (As) max.0.00002 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0002 %
- Magnesium (Mg) max. 0.0005 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0001 %
- Residue on ignition max. 0.005 %
- Water (KF) max. 0.1 %
- Sulphated ash max. 0.01 %
- pH (5 %, 25 °C) 4.8 – 6.0

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2616.1000
5 kg	Plastic bottle	2616.5000

AMMONIUM THIOCYANATE

- $(NH_4)SCN$
- M = 76.12 g/mol
- CAS-No. 1762-95-4
- EC Index No. 615-004-00-3
- EC-No. 217-175-6

GHS

- H302+H312+H332 H412 EUH032
- P261 P280 P312 P501



Specification

- White crystals
- Melting point 150 °C

AMMONIUM THIOCYANATE PH. EUR., USP, ACS, ISO (MIN. 97.5 %)

Specification

- Identity complies
- Assay (argentometric) min. 97.5 %
- pH (5 %, 25 °C) 4.5 – 6.0
- Insoluble matter in water max. 50 ppm
- Residue on ignition max. 250 ppm
- Reducing iodine max. 0.004 meq/g
- Chloride (Cl) max. 50 ppm
- Sulphate (SO_4) max. 50 ppm
- Heavy metals (as Pb) max. 5 ppm
- Iron (Fe) max. 3 ppm

Quantity	Packaging Material	Art. no.
25 kg	Plastic drum	2635.9025

ANILINE

- C_6H_7N
- M = 93.13 g/mol
- CAS-No. 62-53-3
- EC Index No. 612-008-00-7
- EC-No. 200-539-3
- Density 1.02 g/ml
- UN-No. 1547
- ADR 6.1, II

GHS

- H301+H311+H331 H317 H318 H341 H351 H372 H400
- P260 P280 P302+P352 P304+P340 P305+P351+P338 P308+P311 P403+P235 P501

Danger



Specification

- Light brown liquid
- Melting point -6.2 °C
- Boiling point 184 °C

ANILINE P. A. (MIN. 99.5 %)

Specification

- Water max. 0.1 %
- Nitrobenzene ($C_6H_5NO_2$) max. 0.003 %
- Non-volatile substances max. 0.005 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2613.1000

ASCORBIC ACID

- $C_6H_8O_6$
- M = 176.13 g/mol
- CAS-No. 50-81-7
- EC-No. 200-066-2

L-(+)-ASCORBIC ACID PURISS., BP, PH. EUR., USP, E300, FCC10 (MIN. 99.0 %)

Specification

- White crystals
- Melting point 189 – 193 °C
- Assay 99.0 – 100.5 %
- Identity complies
- pH (2 % solution) 2.4 – 2.8
- pH (5 % solution) 2.1 – 2.6
- Spec. rotation +20.5 – 21.5°
- Heavy metals max. 10 ppm
- Copper (Cu) max. 5 ppm
- Iron (Fe) max. 2 ppm
- Mercury (Hg) max. 1 ppm
- Arsenic (As) max. 3 ppm
- Lead (Pb) max. 2 ppm
- Loss on drying max. 0.4 %
- Sulphated ash max. 0.1 %
- Impurity E ($C_2H_2O_4$) max. 0.2 %
- Impurity C max. 0.15 %
- Impurity D max. 0.15 %
- Unspecified impurities max. 0.10 %
- Total impurities (other than C and D) max. 0.20 %
- Methanol (CH_3OH) max. 3000 ppm
- TAMC max. 1000 CFU/g
- TYMC max. 100 CFU/g
- E. Coli absence

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2642.1000

BARIUM CARBONATE

- $BaCO_3$
- M = 197.34 g/mol
- CAS-No. 513-77-9
- EC Index No. 056-003-00-2
- EC-No. 208-167-3
- Density 4.43 g/ml

GHS

- H302
- P262 P301+P312 P501

Warning

Specification

- Colourless solid
- Melting point >1450 °C (decomposition)

BARIUM CARBONATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.015 %
- Barium hydroxide ($Ba(OH)_2$) max. 0.015 %
- Calcium (Ca) max. 0.02 %
- Iron (Fe) max. 0.001 %
- Strontium (Sr) max. 0.3 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.002 %
- Nitrate (NO_3) max. 0.005 %
- Insoluble matter in hydrochloric acid max. 0.015 %
- Sulphur (S) max. 0.001 %
- Potassium (K) max. 0.005 %
- Sodium (Na) min. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2507.1000

BARIUM CHLORIDE DIHYDRATE

- $BaCl_2$ x 2 H_2O
- M = 244.28 g/mol
- CAS-No. 10326-27-9
- EC Index No. 056-004-00-8
- EC-No. 233-788-1
- Density 3.86 g/ml
- UN-No. 1564
- ADR 6.1, III

GHS
- H301 H332
- P261 P301+P310 P304+P312 P501

Danger 

Specification
- Colourless solid
- Melting point 962 °C

BARIUM CHLORIDE DIHYDRATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification
- Insoluble matter max. 0.005 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0001 %
- Potassium (K) max. 0.0025 %
- Magnesium (Mg) max. 0.001 %
- Sodium (Na) max. 0.005 %
- Strontium (Sr) max. 0.01 %
- Heavy metals (as Pb) max. 0.0005 %
- Nitrogen (N) max. 0.002 %
- Loss on drying 14.0 – 16.0 %
- pH (5 %, 25 °C) 5.2 – 8.2
- Nitrate (NO_3) max. 0.005 %
- Lead (Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2515.0500
1 kg	Plastic bottle	2515.1000

BARIUMHYDROXIDE OCTAHYDRATE

- $Ba(OH)_2$ x 8 H_2O
- M = 315.47 g/mol
- CAS-No. 12230-71-6
- EC Index No. 056-002-00-7
- EC-No. 241-234-5
- Density 2.18 g/ml
- UN-No. 3262
- ADR 8, II

GHS
- H302+H332 H314
- P280 P301+P330+P331 P305+P351+P338 P310 P501

Danger  

Specification
- White or colourless solid
- Melting point 78 °C

BARIUMHYDROXIDE OCTAHYDRATE P. A., ISO, PH. EUR. (MIN. 98.0 %)

Specification
- Insoluble matter max. 0.005 %
- Barium carbonate ($BaCO_3$) max. 2.0 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0003 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.002 %
- Sodium (Na) max. 0.005 %
- Strontium (Sr) max. 1.5 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Sulphur (S) max. 0.0005 %
- Insoluble matter in hydrochloric acid max. 0.005%

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2502.0500
1 kg	Plastic bottle	2502.1000

BENZALDEHYDE

- C_7H_7O
- M = 106.13 g/mol
- CAS-No. 100-52-7
- EC Index No. 605-012-00-5
- EC-No. 202-860-4
- Density 1.05 g/ml
- UN-No. 1990
- ADR 9, III

GHS
- H302
- P280 P301+P312 P302+P352 P501

Warning 

Specification
- Colourless liquid
- Melting point -26 °C
- Boiling point 179 °C

BENZALDEHYDE FOR SYNTHESIS (MIN. 99.0 %)

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2509.1000
2.5 l	Glass bottle	2509.2500

BENZYL ALCOHOL

- C_7H_7OH
- M = 108.14 g/mol
- CAS-No. 100-51-6
- EC Index No. 603-057-00-5
- EC-No. 202-859-9
- Density (20 °C) ~1.04 g/ml

GHS
- H302+H312
- P261 P264 P271 P301+P312 P304+P340 P330 P501

Warning



Specification
- Clear liquid
- Boiling point 204.5 – 205.5 °C

BENZYL ALCOHOL FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Identity complies
- Water (KF) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2521.1000

BENZYL ALCOHOL P. A. (MIN. 99.8 %)

Specification
- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 19725
- Water (KF) max. 0.1 %
- Total chlorine (Cl_2) max. 100 ppm
- Benzaldehyde (C_7H_6O) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2510.1000

N,O-BIS(TRIMETHYLSILYL)ACETAMIDE

- $CH_3C[NSi(CH_3)_3]OSi(CH_3)_3$
- M = 203.43 g/mol
- CAS-No. 10416-59-8
- EC-No. 233-892-7
- Density (20 °C) ~0.835 g/ml
- UN-No. 1993
- ADR 3, III

GHS
- H226 H302 H314 EUH014
- P210 P241 P280 P303+P361+P353 P304+P340 P305+P351+P338 P403+P235 P501

Danger



Specification
- Clear, yellow liquid
- Boiling point 71 – 73 °C

N,O-BIS(TRIMETHYLSILYL)ACETAMIDE P. A. (BSA)

Specification
- Identity complies

Quantity	Packaging Material	Art. no.
25 ml	Glass bottle	2607.0025



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N,O-BIS(TRIMETHYLSILYL)TRIFLUOROACETAMIDE

- $C_8H_{18}F_3NOSi_2$
- M = 257.39 g/mol
- CAS-No. 25561-30-2
- EC-No. 247-103-9
- Density (20 °C) 0.96 g/ml
- UN-No. 2920
- ADR 8 (3), II

GHS
- H226 H314
- P210 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P308+P311



Specification
- Clear, yellow liquid
- Melting point -10 °C
- Boiling point 45 – 50 °C

N,O-BIS(TRIMETHYLSILYL)TRIFLUOROACETAMIDE P. A. (BSTFA) (MIN. 98.0 %)

Specification
- Identity complies

Quantity	Packaging Material	Art. no.
25 ml	Glass bottle	769.0025

BORIC ACID

- H_3BO_3
- M = 61.83 g/mol
- CAS-No. 10043-35-3
- EC Index No. 005-007-00-2
- EC-No. 233-139-2
- Density 1.44 g/ml

GHS
- H360FD
- P201 P202 P280 P308+P313 P405 P501



Specification
- Colourless crystals or white crystalline powder
- Melting point 185 °C

BORIC ACID P. A., ACS, ISO, PH. EUR. (MIN. 99.8 %)

Specification
- Insoluble matter max. 0.005 %
- Insoluble matter in methanol max. 0.005 %
- Non-volatile substances with methanol max. 0.05 %
- Chloride (Cl) max. 0.0003 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.0005 %
- Heavy metals (as Pb) max. 0.001 %
- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.002 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0001 %
- Magnesium (Mg) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2563.1000
2.5 kg	Plastic bottle	2563.2500

BORIC ACID SOLUTION

- H_3BO_3

BORIC ACID 1 % WITH INDICATOR

- Density 1.00 g/ml

Specification
- Assay 10 g H_3BO_3 + indicator/l H_2O
- pH 4.80 – 5.00
- Indicator Methyl red/Bromocresol green

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2557.5000

BORIC ACID 2 % W/V WITHOUT INDICATOR

Specification

- Assay 1.96 – 2.04 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2544.5000
10 l	Plastic canister	2544.9010

BORIC ACID 4 % W/V WITHOUT INDICATOR

Specification

- Assay 3.92 – 4.08 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2545.5000

1,4-BUTANEDIOL

- $C_4H_{10}O_2$
- CAS-No. 110-63-4
- EC-No. 203-786-5
- Density (20 °C) 1.015 – 1.016 g/ml

GHS

- H302



Specification

- Colourless liquid

1,4-BUTANEDIOL (MIN. 99.0 %)

Quantity	Packaging Material	Art. no.
10 l	Plastic canister	2550.9010

1-BUTANOL

- C_4H9OH
- M = 74.12 g/mol
- CAS-No. 71-36-3
- EC Index No. 603-004-00-6
- EC-No. 200-751-6
- Density 0.81 g/ml
- UN-No. 1120
- ADR 3, III

GHS

- H226 H302 H315 H318 H335 H336
- H226 H302 H315 H318 H335 H336



Specification

- Colourless liquid
- Boiling point 117 °C

1-BUTANOL P. A. (MIN. 99.5 %)

Specification

- Refractive index (20 °C) 1.397 – 1.401
- Water (KF) max. 1000 mg/kg
- Non-volatile substances max. 10 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2513.1000
2.5 l	Glass bottle	2513.2500

2-BUTANOL

- C_4H_9OH
- M = 74.12 g/mol
- CAS-No. 78-92-2
- EC Index No. 603-127-00-5
- EC-No. 201-158-5
- Density (20 °C) 0.801 – 0.811 g/ml
- UN-No. 1120
- ADR 3, II

GHS
- H226 H319 H335 H336
- P210 P261 P280 P312 P403+P233 P501



Specification
- Clear liquid
- Boiling point 99 – 100 °C

2-BUTANOL FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Identity complies
- Refractive index (20 °C) 1.3944 – 1.3984
- Colour (APHA) max. 10
- Solubility in water complies
- Water (KF) max. 0.2 %
- Residue on evaporation max. 20 ppm
- Acidity (as C_3H_7COOH) max. 20 ppm
- Alkalinity (as NaOH) max. 10 ppm
- Indole (C_8H_7N) max. 0.1 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2588.1000

TERT.-BUTANOL

- C_4H_9OH
- M = 74.12 g/mol
- CAS-No. 75-65-0
- EC Index No. 603-005-00-1
- EC-No. 200-889-7
- Density 0.77 g/ml
- UN-No. 1120
- ADR 3, II

GHS
- H225 H319 H312+H332 H335
- P210 P261 P280 P312 P403+P233 P501



Specification
- Clear, colourless liquid or solid
- Melting point 25 – 26 °C
- Boiling point 81.7 – 82.7 °C

TERT.-BUTANOL P. A., ACS, PH. EUR., USP (MIN. 99.5 %)

Specification
- Identity (IR) complies
- Colour (APHA) max. 10
- Water (KF) max. 0.1 %
- Residue on evaporation max. 30 ppm
- Acidity max. 0.001 meq/g
- Carbonyl compounds (as HCHO) max. 0.01 %
- Solubility in water complies
- Alcohol miscibility complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2585.1000

2-BUTANONE

- C_4H_8O
- M = 72.11 g/mol
- CAS-No. 78-93-3
- EC Index No. 606-002-00-3
- EC-No. 201-159-0
- Density (20 °C) 0.80 – 0.81 g/ml
- UN-No. 1193
- ADR 3, II

GHS
- H225 H319 H336 EUH066
- P210 P233 P241 P243 P261 P280 P303+P361+P353 P305+P351+P338 P312 P403+P235 P501



Specification
- Colourless liquid
- Melting point -86.3 °C
- Boiling point 79 – 80.5 °C

2-BUTANONE FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Water max. 0.2 %
- Free acid max. 0.002 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1430.1000
2.5 l	Glass bottle	1430.2500
25 l	Plastic canister	1430.9025

N-BUTYL ACETATE

- $CH_3COO(CH_2)_3CH_3$
- M = 116.16 g/mol
- CAS-No. 123-86-4
- EC Index No. 607-025-00-1
- EC-No. 204-658-1
- Density 0.88 g/ml
- UN-No. 1123
- ADR 3, III

GHS

- H226 H336 EUH066
- P210 P241 P243 P261 P271 P303+P361+P353 P304+P340 P312 P403+P233 P501

Warning



Specification

- Colourless liquid
- Melting point -76 °C
- Boiling point 124 – 127 °C

N-BUTYL ACETATE FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Free acid max. 0.02 %
- n-Butanol (C_4H_9O) max. 1.0 %
- Water max. 0.1 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2593.2500

N-BUTYL ACETATE PURISS. (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Free acid max. 0.02 %
- n-Butanol (C_4H_9O) max. 1.0 %
- Water max. 0.1 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2568.2500

TERT.-BUTYL METHYL ETHER

- $C_5H_{12}O$
- M = 88.15 g/mol
- CAS-No. 1634-04-4
- EC Index No. 603-181-00-X
- EC-No. 216-653-1
- Density (20 °C) 0.74 g/ml
- UN-No. 2398
- ADR 3, II

GHS

- H225 H315
- P210 P233 P241 P243 P280 P303+P361+P353 P332+P313 P403+P235 P501

Danger



Specification

- Colourless liquid
- Melting point -108.6 °C
- Boiling point 55 °C

TERT.-BUTYL METHYL ETHER FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Water max. 0.05 %
- Non-volatile substances max. 0.001 %
- Hydrogen peroxide (H_2O_2) max. 0.0005 %
- Acidity max. 0.001 meq/g

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2540.2500

TERT.-BUTYL METHYL ETHER PURISS. (MIN. 99.0 %)

Specification

- Water max. 0.05 %
- Hydrogen peroxide (H_2O_2) max. 0.0005 %
- Non-volatile substances max. 0.001 %
- Acidity max. 0.001 meq/g

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2581.2500
5 l	Plastic canister	2581.5000

TERT.-BUTYL METHYL ETHER P. A. (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.367 – 1.371
- Water (KF) max. 150 mg/kg
- Non-volatile substances max. 10 mg/kg
- Colour (Hazen) max. 10
- Methanol (CH_3OH) and tert.-Butanol (C_4H_9OH) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2524.1000
2.5 l	Glass bottle	2524.2500

TERT.-BUTYL METHYL ETHER FOR HPLC (MIN. 99.8 %)

Specification

- Colour (Hazen) max. 10
- Refractive index (20 °C) 1.367 – 1.371
- Water (KF) max. 100 mg/kg
- Methanol (CH_3OH) and tert.-Butanol (C_4H_9OH) max. 0.05 %
- Non-volatile substances max. 10 mg/kg
- UV transmittance at 210 nm min. 10.0 %
- UV transmittance at 230 nm min. 40.0 %
- UV transmittance at 250 nm min. 75.0 %
- UV transmittance at 280 nm min. 92.0 %
- UV transmittance at 300 nm min. 98.0 %
- Hydrocarbons up to C_8 max. 0.05 %
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2529.1000
2.5 l	Glass bottle	2529.2500

CAESIUM CHLORIDE

- CsCl
- M = 168.36 g/mol
- CAS-No. 7647-17-8
- EC-No. 231-600-2
- Density 3.97 g/ml

Specification

- White crystals
- Melting point 646 °C
- Boiling point 1137 – 1382 °C

CAESIUM CHLORIDE P. A. (MIN. 99.5 %)

Specification

- Barium (Ba) max. 0.002 %
- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.002 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.002 %
- Lead (Pb) max. 0.0001 %
- Rubidium (Rb) max. 0.008 %
- Zinc (Zn) max. 0.0002 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	9715.0100

CALCIUM ACETATE MONOHYDRATE

- $Ca(CH_3COO)_2 \times H_2O$
- M = 158.17 g/mol
- CAS-No. 114460-21-8
- EC-No. 200-540-9
- Density 1.50 g/ml

Specification

- Colourless solid

CALCIUM ACETATE MONOHYDRATE P. A., FCC, E263 (MIN. 99.0 %)

Specification

- Water max. 7.0 %
- Arsenic (As) max. 0.0001 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Heavy metals (as Pb) max. 0.002 %
- Chloride (Cl) max. 0.03 %
- Fluoride (F) max. 0.005 %
- Sulphate (SO_4) max. 0.05 %
- Reducing substances max. 0.2 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2405.1000

CALCIUM CARBONATE

- $CaCO_3$
- M = 100.09 g/mol
- CAS-No. 471-34-1
- EC-No. 207-439-9
- Density 2.93 g/ml

Specification

- Colourless powder
- Melting point 825 °C (decomposition)

CALCIUM CARBONATE P. A., ISO (MIN. 99.5 %)

Specification

- Insoluble matter max. 0.005 %
- Barium (Ba) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.05 %
- Sodium (Na) max. 0.2 %
- Lead (Pb) max. 0.0005 %
- Strontium (Sr) max. 0.05 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- Insoluble matter in hydrochloric acid max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2414.1000

CALCIUM CHLORIDE DIHYDRATE

- $CaCl_2$ x 2 H_2O
- M = 147.02 g/mol
- CAS-No. 10035-04-08
- EC-No. 233-140-8
- Density 1.85 g/ml

GHS

- H319
- P264 P280 P305+P351+P338 P337+P313



Specification

- White powder
- Melting point 176 °C

CALCIUM CHLORIDE DIHYDRATE P. A. (MIN. 99.5 %)

Specification

- Ammonium (NH_4) max. 0.005 %
- Arsenic (As) max. 0.0001 %
- Barium (Ba) max. 0.003 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0003 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Strontium (Sr) max. 0.01 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Nitrate (NO_3) max. 0.002 %
- Sulphate (SO_4) max. 0.005 %
- Nickel (Ni) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- pH (50 g/l) 4.5 – 9.5

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2461.0500
1 kg	Plastic bottle	2461.1000
2.5 kg	Plastic bottle	2461.2500

CALCIUM HYDROXIDE

- $Ca(OH)_2$
- M = 74.10 g/mol
- CAS-No. 1305-62-0
- EC-No. 215-137-3
- Density 2.24 g/ml

GHS

- H315 H318 H335
- P233 P261 P280 P302+P352 P304+P340 P310 P305+P351+P338 P332+P313 P405 P501

Danger



Specification

- Colourless powder
- Melting point 550 °C
- Boiling point 2850 °C

CALCIUM HYDROXIDE P. A., ACS, PH. EUR. (MIN. 96.0 %)

Specification

- Calcium carbonate ($CaCO_3$) max. 3.0 %
- Insoluble matter max. 0.03 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.05 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.05 %
- Strontium (Sr) max. 0.05 %
- Heavy metals (as Pb) max. 0.003 %
- Insoluble matter in hydrochloric acid max. 0.03 %
- Magnesium (Mg) max. 0.5 %
- Potassium (K) max. 0.05 %
- Sodium (Na) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2495.1000

CALCIUM NITRATE TETRAHYDRATE

- $Ca(NO_3)_2 \times 4\ H_2O$
- M = 236.15 g/mol
- CAS-No. 13477-34-4
- EC-No. 233-332-1
- Density 1.82 g/ml
- UN-No. 1454
- ADR 5.1, III

GHS

- H272
- P210 P501

Danger



Specification

- Colourless solid
- Melting point 45 °C

CALCIUM NITRATE TETRAHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Ammonium (NH_4) max. 0.005 %
- Barium (Ba) max. 0.005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.01 %
- Sodium (Na) max. 0.01 %
- Strontium (Sr) max. 0.01 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.002 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.002 %
- pH (5 %, 25 °C) 5.0 – 7.0
- Insoluble matter max. 0.005 %
- Nitrite (NO_2) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2445.0500
1 kg	Plastic bottle	2445.1000

Chemical binder for more information ⟶ see page 288

CALCIUM SULPHATE DIHYDRATE

- $CaSO_4$ x 2 H_2O
- M = 172.17 g/mol
- CAS-No. 10101-41-4
- EC-No. 231-900-3
- Density 2.32 g/ml

Specification

- Colourless to white solid

CALCIUM SULPHATE DIHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.02 %
- Free acid max. 0.01 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.002 %
- Magnesium (Mg) max. 0.002 %
- Sodium (Na) max. 0.02 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Carbonate (CO_3) max. 0.005 %
- Chloride (Cl) max. 0.002 %
- Nitrate (NO_3) max. 0.005 %
- Insoluble matter in hydrochloric acid max. 0.02 %
- Heavy metals (as Pb) max. 0.002 %
- Strontium (Sr) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2403.0500
1 kg	Plastic bottle	2403.1000

CHLOROBENZENE

- C_6H_5Cl
- M = 112.56 g/mol
- CAS-No. 108-90-7
- EC Index No. 602-033-00-1
- EC-No. 203-628-5
- Density (20 °C) 1.103 – 1.109
- UN-No. 1134
- ADR 3, III

GHS

- H226 H315 H332 H411
- P210 P241 P273 P303+P361+P353 P304+P340 P403+P235 P501



Specification

- Clear, yellowish liquid
- Melting point -45 °C
- Boiling point 131.5 – 132.5 °C

CHLOROBENZENE FOR SYNTHESIS (MIN. 99.9 %)

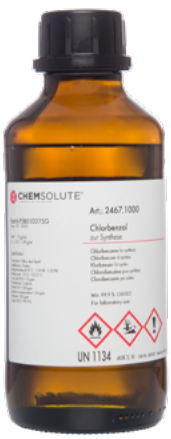
Specification

- Identity complies
- Titratable base complies
- Refractive index (20 °C) 1.5198 – 1.5298
- Benzene (C_6H_6) max. 200 ppm
- Water (KF) max. 500 ppm
- Free acid (HCl) max. 10 ppm
- Residue on evaporation max. 50 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2467.1000
2.5 l	Glass bottle	2467.2500







CHLOROFORM

- $CHCl_3$
- M = 119.38 g/mol
- CAS-No. 67-66-3
- EC Index No. 602-006-00-4
- EC-No. 200-663-8
- Density (20 °C) 1.479 – 1.483 g/ml
- UN-No. 1888
- ADR 6.1, III

GHS

- H302 H315 H319 H331 H351 H361d H372
- P201 P202 P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P308+P313 P403+P233 P501

Danger



Specification

- Colourless liquid
- Melting point -63 °C
- Boiling point 61 – 61.5 °C

CHLOROFORM FOR SYNTHESIS (MIN. 99.5 % (STAB.))

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.05 %
- Stabilized with amylene 20 ppm
- Chloride (Cl) max. 0.0001 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2449.2500

CHLOROFORM PURISS. (MIN. 99.0 % (STAB.))

Specification

- Colour (APHA) max. 10
- Identity (IR) complies
- Density (20 °C) 1.478 – 1.488
- Refractive index (20 °C) 1.4461 – 1.4491
- Free acid (as HCl) max. 50 ppm
- Ethyl alcohol 0.6 – 1.0 %
- Residue on evaporation max. 20 ppm
- Water (KF) max. 300 ppm

Quantity	Packaging Material	Art. no.
200 l	Metal drum	2481.9200

CHLOROFORM P. A., ISO, PH. EUR. (MIN. 99.5 % (STAB.))

Specification

- Non-volatile substances max. 0.0005 %
- Water max. 0.01 %
- Free acid max. 0.00005 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000005 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Chloride (Cl) max. 0.0001 %
- Free chlorine (Cl_2) max. 0.00001 %
- Aldehydes and ketones max. 0.005 %
- Carbonyl compounds (as CO) max. 0.005 %
- Dichloromethane (CH_2Cl_2) max. 0.01 %
- Tetrachloromethane (CCl_4) max. 0.01 %
- Tetrachloroethylene (C_2Cl_4) max. 0.01 %
- Trichloroethylene (C_2HCl_3) max. 0.01 %
- Stabilized with amylene

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2475.1000
2.5 l	Glass bottle	2475.2500
25 l	Metal drum	2475.9025

CHLOROFORM FOR HPLC (MIN. 99.9 % (STAB.))

Specification

- Identity complies
- Refractive index (20 °C) 1.444 – 1.448
- Water (KF) max. 100 ppm
- Residue on evaporation max. 5 ppm
- Acidity max. 0.0005 meq/g
- Alkalinity max. 0.0002 meq/g
- UV Transmittance at 250 nm min. 50.0 %
- UV Transmittance at 260 nm min. 90.0 %
- UV Transmittance at 275 nm min. 98.0 %
- Dichloromethane (CH_2Cl_2) max. 50 ppm
- Tetrachloromethane (CCl_4) max. 100 ppm
- Stabilized with ethanol 0.6 – 1,0 %
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2476.2500

CHLOROFORM FOR TRACE ANALYSIS (MIN. 99.95 % (STAB.))

Specification

- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 3 mg/kg
- Colour (Hazen) max. 10
- Free acid (as HCl) max. 5 mg/kg
- Ethanol (C_2H_5OH) max. 1 % w/w
- Carbon tetrachloride (CCl_4) max. 100mg/kg
- Dichloromethane (CH_2Cl_2) max. 100 mg/kg
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 2 ng/l
- GC-FID: Peak (n-hexadecane) (Retention range n-undecane to n-tetracontane) max. 2 µg/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2427.2500

CHROMIUM(III) CHLORIDE HEXAHYDRATE

- $CrCl_3$ x 6 H_2O
- M = 266.45 g/mol
- CAS-No. 10060-12-5
- EC-No. 233-038-3
- Density 2.76 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H290 H302 H317 H411
- P260 P262 P280 P301+P312 P302+P352 P390 P501



Specification

- Green solid
- Melting point 95 °C

CHROMIUM(III) CHLORIDE HEXAHYDRATE P. A. (MIN. 98.0 %)

Specification

- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.03 %
- Lead (Pb) max. 0.005 %
- Sulphate (SO_4) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2407.1000

CITRIC ACID MONOHYDRATE

- $C_6H_8O_7$ x H_2O
- M = 210.14 g/mol
- CAS-No. 5949-29-1
- EC-No. 201-069-1
- Density (20 °C) 1.54 g/ml

GHS

- H319
- P264 P280 P305+P351+P338 P337+P313



Specification

- Colourless to white crystalline powder

CITRIC ACID MONOHYDRATE PURISS., PH. EUR., USP, FCC, E330 (99.5 – 100.3 %)

Specification

- Assay 99.5 – 100.5 %
- Identity complies
- Clarity of solution complies
- Colour of solution complies
- Conduct towards sulphuric acid complies
- Water 7.5 – 8.8 %
- Arsenic (As) max. 1 mg/kg
- Calcium (Ca) max. 200 mg/kg
- Iron (Fe) max. 50 mg/kg
- Lead (Pb) max. 0.5 mg/kg
- Mercury (Hg) max. 1 mg/kg
- Heavy metals max. 10 mg/kg
- Oxalate (C_2O_4) max. 100 mg/kg
- Chloride (Cl) max. 50 mg/kg
- Sulphate (SO_4) max. 150 mg/kg
- Sulphated ash max. 0.5 %
- Residue on ignition max. 0.5 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2417.1000

CITRIC ACID MONOHYDRATE P. A., ACS, ISO, PH. EUR. (99.5 – 101 %)

Specification

- Assay 99.5 – 101 %
- Water ±8 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0003 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Oxalate (C_2O_4) max. 0.005 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.002 %
- Sulphated ash max. 0.02 %
- Carbonyl compounds complies
- Readily carbonizable substances complies
- Insoluble matter max. 0.005 %
- Residue after ignition max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2432.1000

CITRIC ACID SOLUTION

- $C_6H_8O_7$

GHS

- H319 H335
- P280 P305+P351+P338 P337+P313 P501



Specification

- Clear, almost colourless liquid

CITRIC ACID SOLUTION 50 % (49.0 – 51.0 %)

Specification

- Heavy metals (as Pb) max. 5 mg/kg
- Mercury (Hg) max. 1 mg/kg
- Lead (Pb) max. 0.5 mg/kg
- Arsenic (As) max. 1 mg/kg
- Calcium (Ca) max. 100 mg/kg
- Magnesium (Mg) max. 50 mg/kg
- Chloride (Cl) max. 50 mg/kg
- Sulphate (SO_4) max. 100 mg/kg
- Oxalic acid/Oxalate max. 100 mg/kg
- Transmittance at 450 nm min. 98.0 %
- Absorption at 405 nm max. 0.015 %
- Sulphated ash max. 0.05 %

Quantity	Packaging Material	Art. no.
25 kg	Plastic canister	2425.9025

CLEANING PRODUCTS

CHEMSOLUTE® SURFACE DISINFECTANT CLEANER

- Density 0.985 g/ml

GHS

- H302 H315 H318 H411
- P273 P280 P305+P351+P338 P310 P501



Specification

- Clear, greenish liquid
- pH (20 °C) 44628
- BAuA Reg. No. 25330
- Works bactericidal, fungicidal and virucidal
- Complies with DGHM guidelines

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2891.1000
5 l	Plastic canister	2891.5000

CHEMSOLUTE® ALKALINE UNIVERSAL LIQUID CLEANER

- Density ~ 1.20 g/ml
- UN-No. 1814
- ADR 8, III

GHS

- H290 H315 H318
- P280 P302+P352 P305+P351+P338

Danger



Specification

- Clear colourless to slightly yellowish liquid
- Contains Sodium hydroxide

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2864.2500

COBALT(II) CHLORIDE HEXAHYDRATE

- $CoCl_2$ x 6 H_2O
- M = 237.93 g/mol
- CAS-No. 7791-13-1
- EC Index No. 027-004-00-5
- EC-No. 231-589-4
- Density 1.92 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H317 H334 H341 H350 H360 H410
- P201 P273 P280 P304+P340 P308+P313 P501

Danger



Specification

- Red solid
- Melting point 56 °C

COBALT(II) CHLORIDE HEXAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Ammonium (NH_4) max. 0.002 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.005 %
- Manganese (Mn) max. 0.01 %
- Sodium (Na) max. 0.05 %
- Nickel (Ni) max. 0.05 %
- Lead (Pb) max. 0.003 %
- Zinc (Zn) max. 0.002 %
- Nitrate (NO_3) max. 0.01 %
- Sulphate (SO_4) max. 0.005 %
- Insoluble matter max. 0.005 %
- Substances not precipitated by ammonium sulfide max. 0.25 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	2442.0100

COPPER(II) CHLORIDE

- $CuCl_2$
- M = 134.45 g/mol
- CAS-No. 7447-39-4
- EC-No. 231-210-2
- Density 3.39 g/ml
- UN-No. 2802
- ADR 8, III

GHS

- H302 H315 H319 H410
- P260 P273 P302+P352 P305+P351+P338 P501

Warning



Specification

- Green solid
- Melting point 630 °C (decomposition)

COPPER(II) CHLORIDE ANHYDROUS PURISS. (MIN. 98.0 %)

Specification

- Water max. 1 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2485.0500

COPPER(II) CHLORIDE DIHYDRATE

- $CuCl_2$ x 2 H_2O
- M = 170.48 g/mol
- CAS-No. 10125-13-0
- EC-No. 231-210-2
- Density 2.51 – 2.54 g/ml
- UN-No. 2802
- ADR 8, III

GHS

- H302+H312 H315 H319 H410
- P260 P273 P280 P302+P352 P305+P351+P338 P501



Specification

- Blue-green solid
- Melting point 110 °C

COPPER(II) CHLORIDE DIHYDRATE PURISS. (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0005 %
- Calcium (Ca) max. 0.01 %
- Iron (Fe) max. 0.005 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.01 %
- Sodium (Na) max. 0.02 %
- Sulphate (SO_4) max. 0.01 %
- Nitrogen (N) max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2420.1000

COPPER(II) CHLORIDE DIHYDRATE P. A. (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.002 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.002 %
- Magnesium (Mg) max. 0.002 %
- Sodium (Na) max. 0.002 %
- Nickel (Ni) max. 0.005 %
- Lead (Pb) max. 0.004 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.004 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2435.1000

COPPER(II) SULPHATE PENTAHYDRATE

- $CuSO_4$ x 5 H_2O
- M = 249.68 g/mol
- CAS-No. 7758-99-8
- EC Index No. 029-023-00-4
- EC-No. 231-847-6
- Density 2.285 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H318 H410
- P273 P280 P302+P352 P305+P351+P338 P501



Specification

- Blue solid

COPPER(II) SULPHATE PENTAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Assay 99.0 – 101.0 %
- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.001 %
- Cobalt (Co) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Potassium (K) max. 0.001 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.002 %
- Nickel (Ni) max. 0.002 %
- Lead (Pb) max. 0.002 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Nitrogen (N) max. 0.001 %
- Loss on drying 35.0 – 36.5 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2479.1000

M-CRESOL

- $(CH_3)C_6H_4OH$
- M = 108.14 g/mol
- CAS-No. 108-39-4
- EC Index No. 604-004-00-9
- EC-No. 203-377-9
- Density 1.04 g/ml
- UN-No. 2076
- ADR 6.1(8), II

GHS

- H301+H311 H314
- P260 P280 P301+P310 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P501

Danger



Specification

- Red-brown liquid
- Melting point 11.5 °C
- Boiling point 203°C

M-CRESOL FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Refractive index 1.539 – 1.543
- Water (KF) max. 0.05 %
- o-Cresol (C_7H_8O) max. 0.3 %
- Colour (Hazen) max. 120

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1690.1000
2.5 l	Glass bottle	1690.2500

CYCLOHEXANE

- C_6H_{12}
- M = 84.16 g/mol
- CAS-No. 110-82-7
- EC Index No. 601-017-00-1
- EC-No. 203-806-2
- Density (20 °C) 0.774 – 0.784 g/ml
- UN-No. 1145
- ADR 3, II

GHS

- H225 H304 H315 H336 H410
- P210 P240 P273 P280 P301+P310 P302+P352 P331 P403+P233 P501

Danger



Specification

- Colourless liquid
- Melting point 6 – 7 °C
- Boiling point 80 – 82 °C

CYCLOHEXANE FOR SYNTHESIS (MIN. 99.8 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.414 – 1.4314
- Water max. 150 ppm
- Residue on evaporation max. 50 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2455.1000
2.5 l	Glass bottle	2455.2500
10 l	Plastic canister	2455.9010

CYCLOHEXANE P. A., ACS, ISO (MIN. 99.5 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.001 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Aromatic compounds max. 0.05 %
- Cyclohexene (C_6H_{10}) max. 0.05 %
- Benzene (C_6H_6) min. 0.05 %
- Carbonyl compounds (as CO) complies
- Readily carbonisable substances complies
- Colour (APHA) max. 10
- Residue on evaporation max. 0.002 %
- Substances darkened by H_2SO_4 complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2483.1000
2.5 l	Glass bottle	2483.2500

CYCLOHEXANE FOR RESIDUE ANALYSIS (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.424 – 1.428
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 2 mg/kg
- Colour (Hazen) max. 10
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2429.2500

CYCLOHEXANE FOR PESTICIDE ANALYSIS (MIN. 99.8 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.424 – 1.428
- Water max. 100 ppm
- Non-volatile substances max. 2 ppm
- Colour (Hazen) max. 10
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl_4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2448.2500

CYCLOHEXANONE

- $C_6H_{10}O$
- M = 98.15 g/mol
- CAS-No. 108-94-1
- EC Index No. 606-010-00-7
- EC-No. 203-631-1
- Density (20 °C) 0.941 – 0.951 g/ml
- UN-No. 1915
- ADR 3, III

GHS

- H226 H332
- P210 P261 P309+P311 P501



Specification

- Clear, colourless liquid
- Melting point -26 °C
- Boiling point 152 – 157 °C

CYCLOHEXANONE FOR SYNTHESIS (MIN. 99.5 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.4477 – 1.4537
- Residue on evaporation max. 500 ppm
- Water (KF) max. 0.1 %
- Aldehydes (as HCHO) max. 0.1 %
- Cyclohexanol ($C_6H_{11}OH$) max. 0.1 %
- Heavy metals (as Pb) max. 2 ppm
- Iron (Fe) max. 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2489.1000
2.5 l	Glass bottle	2489.2500

CYCLOPENTYLMETHYLETHER

- $C_6H_{12}O$
- M = 100.16 g/mol
- CAS-No. 5614-37-9
- Density (20 °C) 0.86 g/ml
- UN-No. 3271
- ADR 3 (6.1), II

GHS

- H225 H302 H315 H319
- P210 P243 P280 P303+P361+P353 P305+P351+P338 P403+P235 P501



Specification

- Colourless liquid
- Melting point -140 °C
- Boiling point 106 °C

CYCLOPENTYLMETHYLETHER FOR SYNTHESIS, PURE (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.4199 – 1.4219
- Water (KF) max. 100 mg/kg
- Colour (Hazen) max. 10
- Peroxides max. 50 meq/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2497.1000

1,2-DICHLOROBENZENE

- $C_6H_4Cl_2$
- M = 147.00 g/mol
- CAS-No. 95-50-1
- EC Index No. 602-034-007
- EC-No. 202-425-9
- Density (20 °C) 1.32 g/ml
- UN-No. 1591
- ADR 6.1, III

GHS

- H302+H332 H315 H319 H335 H410
- P261 P271 P280 P304+P340 P305+P351+P338 P332+P313 P403+P233 P501



Specification

- Clear liquid
- Melting point -16.7 °C
- Boiling point 179.0 °C

1,2-DICHLOROBENZENE FOR SYNTHESIS (MIN. 98.0 %)

Specification

- Identity complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2325.1000

1,2-DICHLOROETHANE

- $C_2H_4Cl_2$
- M = 98.96 g/mol
- CAS-No. 107-06-2
- EC Index No. 602-012-00-7
- EC-No. 203-458-1
- Density (20 °C) 1.248 – 1.264 g/ml
- UN-No. 1184
- ADR 3 (6.1), II

GHS

- H225 H302 H315 H319 H335 H350
- P210 P241 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P403+P235 P501



Specification

- Clear liquid
- Melting point -36 °C
- Boiling point 83.0 – 84.0 °C

1,2-DICHLORETHANE FOR SYNTHESIS, ACS, USP, PH. EUR. (MIN. 99.8 %)

Specification

- Identity complies
- Colour (APHA) max. 20
- Refractive index (20 °C) 1.4398 – 1.4498
- Water (KF) max. 300 ppm
- Residue on evaporation max. 50 ppm
- Acidity (as HCl) max. 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2331.1000

1,2-DICHLOROETHANE P. A. (MIN. 99.8 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.4418 – 1.4478
- Acidity max. 0.0003 meq/g
- Water (KF) max. 200 ppm
- Residue on evaporation max. 10 ppm
- Free chlorine (Cl_2) max. 1 ppm
- Total phosphorus (P) max. 0.5 ppm
- Substances reducing $KMnO_4$ max. 10 ppm
- Total silicon (Si) max. 0.05 ppm
- Total sulphur (S) max. 0.5 ppm
- Calcium (Ca) max. 0.5 ppm
- Copper (Cu) max. 0.05 ppm
- Iron (Fe) max. 0.1 ppm
- Potassium (K) max. 0.2 ppm
- Magnesium (Mg) max. 0.1 ppm
- Sodium (Na) max. 0.5 ppm
- Lead (Pb) max. 0.02 ppm
- Zinc (Zn) max. 0.2 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2335.1000

More information about Green Solvents → see page 282

1,2-DICHLOROETHANE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Aluminium (Al) max. 0.000005 %
- Barium (Ba) max. 0.000005 %
- Calcium (Ca) max. 0.00002 %
- Cadmium (Cd) max. 0.000002 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.0001 %
- Potassium (K) max. 0.00002 %
- Magnesium (Mg) max. 0.000005 %
- Manganese (Mn) max. 0.000002 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000002 %
- Strontium (Sr) max. 0.000002 %
- Zinc (Zn) max. 0.00001 %
- Non-volatile substances max. 0.002 %
- Free acid max. 0.0003 meq/g
- Chloride (Cl) max. 0.00003 %
- Reducing substances max. 0.001 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.002 %
- Acidity max. 0.0003 meq/g

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2330.1000

DICHLOROMETHANE

- CH_2Cl_2
- M = 84.93 g/mol
- CAS-No. 75-09-2
- EC Index No. 602-004-00-3
- EC-No. 200-838-9
- Density (20 °C) 1.32 – 1.33 g/ml
- UN-No. 1593
- ADR 6.1, III

GHS

- H351
- P201 P202 P280 P308+P313 P405 P501



Specification

- Colourless liquid
- Melting point -95 °C
- Boiling point 39 – 40 °C

DICHLOROMETHANE P. A., ACS, ISO (MIN. 99.8 % (STAB.))

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.001 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Chloride (Cl) max. 0.00005 %
- Free chlorine (Cl_2) max. 0.00002 %
- Chloroform ($CHCl_3$) max. 0.01 %
- Formaldehyde (HCHO) max. 0.0005 %
- Tetrachloromethane (CCl_4) max. 0.01 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.002 %
- Acidity max. 0.0003 meq/g
- Stabilized with amylene

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2371.1000
2.5 l	Glass bottle	2371.2500
25 l	Metal drum	2371.9025

DICHLOROMETHANE FOR HPLC (MIN. 99.9 % (STAB.))

Specification

- Refractive index (20 °C) 1.422 – 1.426
- Water (KF) max. 100 mg/kg
- Residue on evaporation max. 5 ppm
- Free acids (as HCl) max. 5 mg/kg
- UV transmittance at 240 nm min. 60.0 %
- UV transmittance at 250 nm min. 92.0 %
- UV transmittance at 255 nm min. 96.0 %
- Colour (Hazen) max. 10
- Stabilized with amylene 30 – 60 mg/kg
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2356.1000
2.5 l	Glass bottle	2356.2500

DICHLOROMETHANE FOR RESIDUE ANALYSIS (MIN. 99.9 % (STAB.))

Specification

- Assay (without stabilizer) min. 99.9 %
- Refractive index (20 °C) 1.422 – 1.426
- Water (KF) max. 100 mg/kg
- Residue on evaporation max. 5 ppm
- Free acids (as HCl) max. 5 mg/kg
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- Colour (Hazen) max. 10
- PAH test acc. ISO 17993 complies
- Test against standard PAH (each EPA-PAH) min. 0.1 µg/l
- Stabilized with ethanol 0.1 – 0.4 % m/m

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2311.2500

DICHLOROMETHANE FOR PESTICIDE ANALYSIS (MIN. 99.9 % (STAB.))

Specification

- Identity complies
- Water max. 0.01 %
- Non-volatile substances max. 5 mg/kg
- Free acids (as HCl) max. 5 mg/kg
- Colour (Hazen) max. 10
- PAH test acc. ISO 17993 complies
- Stabilized with amylene 30 – 50 mg/kg
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2333.2500

DICHLORMETHANE ANHYDROUS P. A. (MIN. 99.95 % (STAB.))

Specification

- Refractive index (20 °C) 1.422 – 1.426
- Water (KF) max. 50 mg/kg
- Colour (APHA) max. 10
- Free acids (as HCl) max. 5 mg/kg
- Tetrachloromethane (CCl_4) max. 20 mg/kg
- Chloroform ($CHCl_3$) max. 50 mg/kg
- Stabilized with amylene 20 – 60 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2384.1000

DIETHANOLAMINE

- $C_4H_{11}NO_2$
- M = 105.14 g/mol
- CAS-No. 111-42-2
- EC Index No. 603-071-00-1
- EC-No. 203-868-0

GHS

- H302 H314 H335 H373 H412
- P260 P273 P280 P305+P351+P338 P314 P332+P313 P501



Specification

- Clear, colourless liquid
- Melting point 27.8 – 28.3 °C
- Boiling point 269 °C

DIETHANOLAMINE FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Identity complies
- Assay (alkalimetric) min. 99.0 %
- Refractive index (30 °C) 1.4723 – 1.4783
- Water max. 0.5 %
- Monoethanolamine (C_2H_7NO) max. 0.5 %
- Residue on ignition max. 50 ppm
- Triethanolamine ($C_6H_{15}NO_3$) max. 0.5 %
- Density (30 °C) 1.085 – 1.091 g/ml

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2348.1000

DIETHANOLAMINE P. A. (MIN. 99.0 %)

Specification

- Identity complies
- Refractive index (30 °C) 1.4723 – 1.4783
- Water max. 0.5 %
- Monoethanolamine (C_2H_7NO) max. 0.5 %
- Residue on ignition max. 50 ppm
- Triethanolamine ($C_6H_{15}NO_3$) max. 0.5 %
- Density (30 °C) 1.085 – 1.091 g/ml

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2340.1000

DIETHYLAMINE

- $C_4H_{11}N$
- M = 73.14 g/mol
- CAS-No. 109-89-7
- EC Index No. 612-003-00-X
- EC-No. 203-716-3
- Density (20 °C) 0.705 – 0.708 g/ml
- UN-No. 1154
- ADR 8 (3), II

GHS

- H225 H302+H332 H311 H314 H335
- P210 P241 P264 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P403+P235 P501



Specification

- Clear, colourless liquid
- Boiling point 55 – 56 °C

DIETHYLAMINE FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3840 – 1.3900
- Water (KF) max. 0.2 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2358.1000

DIETHYLAMINE P. A. (MIN. 99.0 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3840 – 1.3900
- Residue on evaporation max. 50 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2343.1000

DIETHYLENE GLYCOL

- $C_4H_{10}O_3$
- M = 106.12 g/mol
- CAS-No. 111-46-6
- EC Index No. 603-140-00-6
- EC-No. 203-872-2
- Density (20 °C) 1.112 – 1.122 g/ml

GHS

- H302
- P264 P270 P301+P312 P330 P501



Specification

- Clear, colourless liquid
- Boiling point 240 – 252 °C

DIETHYLENE GLYCOL FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.4425 – 1.4525
- Water max. 0.3 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2361.1000

DIETHYLETHER

- $(C_2H_5)_2O$
- M = 74.12 g/mol
- CAS-No. 60-29-7
- EC Index No. 603-022-00-4
- EC-No. 200-467-2
- Density 0.710 – 0.716 g/ml
- UN-No. 1155
- ADR 3, I

GHS

- H224 H302 H336 EUH019 EUH066
- P210 P241 P260 P303+P361+P353 P304+P340 P403+P235 P501



Specification

- Colourless liquid
- Melting point -116.3 °C
- Boiling point 34.0 – 35.0 °C

DIETHYL ETHER FOR SYNTHESIS, DAB, PH. EUR., BP (MIN. 99.5 % (STAB.))

Specification

- Non-volatile substances max. 0.002 %
- Water max. 0.2 %
- Hydrogen peroxide (H_2O_2) max. 0.0002 %
- Stabilized with BHT 5 – 7 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2367.1000

DIETHYL ETHER P. A., PH. EUR. (MIN. 99.5 % (STAB.))

Specification

- Identity (IR) complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.350 – 1.354
- Water (KF) max. 200 ppm
- Residue on evaporation max. 10 ppm
- Ethanol (C_2H_5OH) max. 100 ppm
- Methanol (CH_3OH) max. 200 ppm
- Peroxides (as H_2O_2) complies
- Heavy metals (as Pb) max. 1 ppm
- Aluminium (Al) max. 0.5 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.05 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm
- Stabilized with BHT approx. 6 ppm
- Density 0.714 – 0.716 g/ml complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2362.1000
2.5 l	Glass bottle	2362.2500
5 l	Metal canister	2362.5000
140 kg	Metal drum	2362.9140

DIETHYL ETHER PHARMA (MIN. 99.5 % (STAB.))

Specification

- Refractive index (20 °C) 1.350 – 1.354
- Total acids max. 20 mg/kg
- Peroxides max. 0.1 ppm
- Stabilized with BHT

Quantity	Packaging Material	Art. no.
140 kg	Metal drum	2309.9140

DIETHYL ETHER ANHYDROUS P. A. (MIN. 99.7 % (STAB.))

Specification

- Refractive index (20 °C) 1.350 – 1.354
- Water (KF) max. 200 ppm
- Colour (APHA) max. 10
- Peroxides (as H_2O_2) max. 1 ppm
- Stabilized with BHT 5 – 7 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2368.1000

DIHYDROLEVOGLUCOSENONE

- $C_6H_8O_3$
- M = 128.13 g/mol
- CAS-No. 53716-82-8
- Density (20 °C) 1.245 – 1.255 g/ml

GHS
- H319
- P280 P305+P351+P338 P337+P313 P510



Specification
- Clear, colourless to pale yellow liquid
- Boiling point 116.0 – 116.5 °C

DIHYDROLEVOGLUCOSENONE P.A. (MIN. 99.0 %)

Specification
- Water miscibility complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2322.1000

DIISOPROPYLAMINE

- $C_6H_{15}N$
- M = 101.19 g/mol
- CAS-No. 108-18-9
- EC Index No. 612-129-00-5
- EC-No. 203-558-5
- Density 0.72 g/ml
- UN-No. 1158
- ADR 3 (8), II

GHS
- H225 H302+H332 H314 H335
- P210 P241 P242 P243 P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P501



Specification
- Clear, colourless liquid
- Melting point -96 °C
- Boiling point 84 °C

DIISOPROPYLAMINE FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Assay min. 99.0 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2349.1000

DIISOPROPYL ETHER

- $C_6H_{14}O$
- M = 102.18 g/mol
- CAS-No. 108-20-3
- EC Index No. 603-045-00-X
- EC-No. 203-560-6
- Density (20 °C) 0.719 – 0.729 g/ml
- UN-No. 1159
- ADR 3, II

GHS
- H225 H336 EUH019 EUH066
- P210 P261 P312 P403+P233 P501



Specification
- Clear, colourless liquid
- Boiling point 66.5 – 69.5 °C

DIISOPROPYL ETHER P. A. (MIN. 98.5 %)

Specification
- Identity (IR) complies
- Peroxides (as H_2O_2) max. 5 ppm
- Water (KF) max. 0.1 %
- Alcohol miscibility complies
- Chloroform miscibility complies
- Diethyl ether miscibility complies
- Stabilized with BHT 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2351.1000

N,N-DIMETHYLACETAMIDE

- C_4H_9NO
- M = 87.12 g/mol
- CAS-No. 127-19-5
- EC Index No. 616-011-00-4
- EC-No. 204-826-4
- Density 0.937 g/ml

GHS
- H312+H332 H360D
- P201 P261 P280 P308+P313



Specification
- Clear, colourless liquid
- Melting point -20 °C
- Boiling point 164 – 166 °C

N,N-DIMETHYLACETAMIDE P. A. (MIN. 99.8 %)

Specification
- Water max. 200 ppm
- Free acids max. 80 ppm
- Free alkali max. 5 ppm
- Iron (Fe) max. 50 ppb
- Coulour (APHA) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2303.1000
2.5 l	Glass bottle	2303.2500

N,N-DIMETHYLFORMAMIDE

- C_3H_7NO
- M = 73.10 g/mol
- CAS-No. 68-12-2
- EC Index No. 616-001-00-X
- EC-No. 200-679-5
- Density (20 °C) 0.945 – 0.955 g/ml
- UN-No. 2265
- ADR 3, III

GHS
- H226 H312+H332 H319 H360D
- P201 P210 P261 P280 P308+P313 P501



Specification
- Clear, colourless liquid
- Boiling point 152.0 – 154.0 °C

N,N-DIMETHYLFORMAMIDE FOR SYNTHESIS (MIN. 99.9 %)

Specification
- Refractive index (20 °C) 1.4229 – 1.4329
- Identity complies
- Colour (APHA) max. 10
- Residue on evaporation max. 50 ppm
- Water (KF) max. 0.03 %
- Methanol (CH_3OH) max. 100 mg/kg
- Free acid (as HCOOH) max. 0.0020 %
- Free alkali (as $HN(CH_3)_2$) max. 0.0010 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2363.2500

N,N-DIMETHYLFORMAMIDE P. A. (MIN. 99.9 %)

Specification
- Refractive index (20 °C) 1.428 – 1.432
- Water (KF) max. 300 mg/kg
- Non-volatile substances max. 20 mg/kg
- Free acids (as HCOOH) max. 20 mg/kg
- Free alkali (as $HN(CH_3)_2$) max. 10 mg/kg
- Methanol (CH_3OH) max. 100 mg/kg
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2385.2500

N,N-DIMETHYLFORMAMIDE FOR HPLC, ISOCRATIC (MIN. 99.9 %)

Specification
- Colour (APHA) max. 10
- Water (KF) max. 0.03 %
- Free acid (as CH_3COOH) max. 0.03 %
- UV transmittance at 270 nm min. 30 %
- UV transmittance at 275 nm min. 60 %
- UV transmittance at 300 nm min. 90 %
- UV transmittance at 320 nm min. 97 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2320.2500

N,N-DIMETHYLFORMAMIDE FOR PEPTIDE SYNTHESIS (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.428 – 1.432
- Water (KF) max. 300 ppm
- Bromophenol blue test conform
- Amine max. 5 mg/kg
- Methanol (CH_3OH) max. 100 mg/kg
- Non-volatile substances max. 15 mg/kg
- Copper (Cu) max. 0.05 ppm
- Cadmium (Cd) max. 0.05 ppm
- Chromium (Cr) max. 0.05 ppm
- Iron (Fe) max. 0.05 ppm
- Nickel (Ni) max. 0.05 ppm
- Lead (Pb) max. 0.1 ppm
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2376.2500

N,N-DIMETHYLFORMAMIDE HEADSPACE GRADE (MIN. 99.98 %)

Specification

- Melting point -61 °C
- Boiling point 153 °C
- Assay (GC, on anhydrous basis) 99.98 – 100 %
- Water (KF) max. 0.025 % w/w
- GC-Headspace complies
- Colour (APHA) max. 10
- Absorption at 275 nm max. 0.25 AU
- Absorption at 290 nm max. 0.15 AU
- Absorption at 300 nm max. 0.07 AU
- Absorption at 320 nm max. 0.02 AU
- Absorption at 350 – 400 nm max. 0.01 AU
- Methanol (CH_3OH) not detected
- Filled under inert gas

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2350.1000

N,N-DIMETHYLFORMAMIDE ANHYDROUS P. A. (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.428 – 1.432
- Water (KF) max. 50 mg/kg
- Colour (APHA) max. 10
- Methanol (CH_3OH) max. 100 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2359.1000

N,N′-DIMETHYLPROPYLENE UREA

- $C_6H_{12}N_2O$
- M = 128.17 g/mol
- CAS-No. 7226-23-5
- EC Index No. 613-280-00-X
- EC-No. 230-625-6
- Density (20 °C) 1.06 g/ml

GHS

- H302 H318 H361f
- P280 P305+P351+P338 P308+P313 P501



Specification

- Clear, colourless to light yellow liquid
- Boiling point 247 °C

N,N'-DIMETHYLPROPYLENE UREA FOR SYNTHESIS, PURE (MIN. 99.0 %)

Specification

- Refractive index (20 °C) 1.4883 – 1.4913
- Water (KF) max. 1000 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2327.1000

More information about Green Solvents → see page 282

DIMETHYL SULFOXIDE

- C_2H_6OS
- M = 78.13 g/mol
- CAS-No. 67-68-5
- EC-No. 200-664-3
- Density (20 °C) 1.096 – 1.106 g/ml

Specification

- Colourless liquid
- Melting point 18 °C
- Boiling point 188 – 190 °C

DIMETHYL SULFOXIDE FOR SYNTHESIS (MIN. 99.8 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.4765 – 1.4825
- Acidity max. 100 ppm
- Water (KF) max. 0.1 %
- Residue on evaporation max. 50 ppm
- Dimethylsulfone ($(CH_3)_2SO_2$) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2380.1000
2.5 l	Glass bottle	2380.2500

DIMETHYL SULFOXIDE, ACS, SUITABLE FOR CELL CULTURE (MIN. 99.9 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.1 %
- Free acid max. 0.0002 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0001 %
- Residue on evaporation max. 0.01 %
- Acidity max. 0.001 meq/g

Quantity	Packaging Material	Art. no.
100 ml	Glass bottle	2308.0100

DIMETHYL SULFOXIDE P. A., ACS (MIN. 99.9 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.1 %
- Free acid max. 0.0002 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0001 %
- Residue on evaporation max. 0.01 %
- Acidity max. 0.001 meq/g

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2347.1000
200 l	Metal drum	2347.9200

DIMETHYL SULFOXIDE HEADSPACE GRADE (MIN. 99.98 %)

Specification

- Assay (GC, on anhydrous basis) 99.98 – 100 %
- Water (KF) max. 0.03 % w/w
- GC-Headspace complies
- Colour (APHA) max. 10
- Absorption at 270 nm max. 0.50 AU
- Absorption at 275 nm max. 0.22 AU
- Absorption at 300 nm max. 0.07 AU
- Absorption at 350 – 400 nm max. 0.02 AU

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2365.1000

DIMIDIUM BROMIDE

- $C_{20}H_{18}BrN_3$
- M = 380.28 g/mol
- CAS-No. 518-67-2
- EC-No. 208-256-7

GHS

- H315 H319 H335
- P280 P314 P501



Specification

- Red-brown powder
- Melting point 246 – 248 °C

DIMIDIUM BROMIDE

Specification

- For surfactant examination
- Identity complies
- Loss on drying max. 5 %
- Absorption maximum 523 – 528 nm

Quantity	Packaging Material	Art. no.
1 g	Glass bottle	2310.0001
5 g	Glass bottle	2310.0005

1,4-DIOXANE

- $C_4H_8O_2$
- M = 88.1 g/mol
- CAS-No. 123-91-1
- EC Index No. 603-024-00-5
- EC-No. 204-661-8
- UN-No. 1165
- ADR 3, II

GHS

- H225 H319 H335 H350 EUH019 EUH066
- P201 P210 P261 P280 P308+P313 P403+P233 P501



Specification

- Clear, colourless liquid

1,4-DIOXANE FOR SYNTHESIS (MIN. 99.5 %)

- Density (20 °C) 1.031 – 1.037 g/ml

Specification

- Melting point 11.8 °C
- Boiling point 100.3 – 101.8 °C
- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.4174 – 1.4274
- Water (KF) max. 0.1 %
- Residue on evaporation max. 50 ppm
- Acetal max. 0.2 %
- Acidity (as CH_3COOH) max. 50 ppm
- Peroxides (as H_2O_2) max. 50 ppm
- Stabilized with BHT 20 – 80 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2373.1000

1,4-DIOXANE P. A. (MIN. 99.8 %)

- Density (20 °C) 1.032 – 1.036 g/ml

Specification

- Boiling point 100.5 – 101.5 °C
- Identity complies
- Refractive index (20 °C) 1.4194 – 1.4254
- Water (KF) max. 500 ppm
- Freezing point 11.5 – 12.1 °C
- Residue on evaporation max. 20 ppm
- Acetal max. 50 ppm
- Acidity max. 0.0016 meq/g
- Carbonyl compounds (as HCHO) max. 100 ppm
- Total phosphorus (P) max. 0.1 ppm
- Peroxides (as H_2O_2) max. 50 ppm
- Total silicon (Si) max. 0.05 ppm
- Total sulphur (S) max. 0.2 ppm
- Calcium (Ca) max. 0.5 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.2 ppm
- Potassium (K) max. 0.1 ppm
- Magnesium (Mg) max. 0.05 ppm
- Sodium (Na) max. 0.5 ppm
- Lead (Pb) max. 0.05 ppm
- Zinc (Zn) max. 0.2 ppm
- Stabilized with BHT approx. 50 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2353.1000
2.5 l	Glass bottle	2353.2500

1,3-DIOXOLANE

- $C_3H_6O_2$
- M = 74.08 g/mol
- CAS-No. 646-06-0
- EC Index No. 605-017-00-2
- EC-No. 211-463-5
- Density (20 °C) 1.06 g/ml
- UN-No. 1166
- ADR 3, II

GHS

- H225 H319
- P210 P243 P280 P303+P361+P353 P305+P351+P338 P403+P235 P501



Specification

- Colourless liquid
- Melting point -26.4 °C
- Boiling point 75 °C

1,3-DIOXOLANE FOR SYNTHESIS, PURE (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.3980 – 1.4020
- Colour (Hazen) max. 10
- Water (KF) max. 150 mg/kg
- Peroxides (as H_2O_2) max. 10 mg/kg
- Stabilized with BHT approx. 75 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2314.1000
5 l	Plastic canister	2314.5000

DISINFECTION AGENT

Specification

- Clear, colourless liquid

CHEMSOLUTE® DISINFECT 2, BIOCIDE (MIN. 80 % (W/W))

- Density ~ 0.89 g/ml
- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P243 280 P305+P351+P338 P403+P235 P501



Specification

- Melting point > 13 °C
- Boiling point > 80 °C
- Ethanol (99.8 % (C_2H_5OH)) min. 80 % (w/w)
- Hydrogen peroxide solution (H_2O_2) 0.125 %
- Glycerol ($C_3H_8O_3$) min. 1.45 %
- Biocide, BAuA Reg. No. N-92100

Quantity	Packaging Material	Art. no.
250 ml	Plastic bottle	2895.0250
5 l	Plastic canister	2895.5000

ETHANOL 70 % V/V, BIOCIDE (MIN. 69.0 %)

- Density 0.88 g/ml

Specification

- Assay 69.0 – 71.0 % v/v
- Identity (IR) complies
- Biocide, Reg. No. N-92166

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2207.1000
5 l	Plastic canister	2207.5000

Dissolution media → see page 202–206

ISOPROPANOL 70 BIOCIDE (MIN. 69.0 %)

Specification

- Refractive index 1.3780 – 1.3737
- Density (20 °C) 0.8593 – 0.8639
- Biocide, BAuA Reg. Nr. N-103210

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1150.1000
5 l	Plastic canister	1150.5000
10 l	Plastic canister	1150.9010
25 l	Plastic canister	1150.9025

1,5-DIPHENYLCARBAZID SOLUTION

- Density 0.7945 g/ml
- UN-No. 1993
- ADR 3, II

GHS

- H225 H319
- P210 P233 P280 P337+P313 P501



Specification

- Colourless solution
- Boiling point 78 °C

1,5-DIPHENYLCARBAZID SOLUTION 1 % (MIN. 1.0 %)

Specification

- Assay min. 1.0 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	DG10190.2500

ETHANOL

- C_2H_5OH
- M = 46.07 g/mol
- CAS-No. 64-17-5
- EC Index No. 603-002-00-5
- EC-No. 200-578-6
- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P233 P241 P243 P280 P337+P313 P403+P235



Specification

- Clear, colourless liquid
- Melting point -117 °C
- Boiling point 78.0 – 79.0 °C

ETHANOL 70 % V/V, BIOCIDE (MIN. 69.0 %)

- Density 0.88 g/ml

Specification

- Assay 69.0 – 71.0 % v/v
- Identity (IR) complies
- Biocide, Reg. No. N-92166

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2207.1000
5 l	Plastic canister	2207.5000

Isopropanol ⟶ 2-Propanol see page 131–135
EDTA Ethylenediaminetetraacetic acid disodium salt dihydrate ⟶ see page 69

ETHANOL PURISS., PH. EUR. (95.1 – 96.9 % V/V)

- Density (20 °C) 0.805 – 0.812 g/ml

Specification

- Identity complies
- Appearance of solution complies
- Acidity or alkalinity complies
- Residue on evaporation max. 0.0025 % m/V
- Origin (BSE/TSE) vegetable
- Absorption complies
- Volatile impurities complies
- Other impurities complies
- Colour of the solution complies
- Methanol (CH_3OH) max. 200 ppm
- Acetales + acetaldehydes max. 10 ppm (v/v)
- Benzene (C_6H_6) max. 2 ppm
- Absorption at 240 nm (5 cm, ref. water) complies
- Absorption at 250 – 260 nm complies
- Absorption at 270 – 340 nm complies
- Residual solvents complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2286.1000
2.5 l	Glass bottle	2286.2500
5 l	Plastic canister	2286.5000
25 l	Plastic canister	2286.9025

ETHANOL 96 % ACS, REAG. PH. EUR. (96.0 – 96.9 % V/V)

- Density (20 °C) 0.8050 – 0.8124 g/ml

Specification

- Assay (20°C) 96.0 – 96.9 % v/v
- Assay (GC) min. 95.0 %
- Colour (APHA) max. 10
- Identification (IR) complies
- Appearance of solution complies
- Absorbance (Ph. Eur.) complies
- Water miscibility (ACS) complies
- Volatile impurities complies
- Substances darkened by H_2SO_4 complies
- Residue on evaporation max. 10 ppm
- Acidity (CH_3COOH) max. 30 ppm
- Alkalinity (as NH_3) max. 0.0002 meq/g
- Methanol max. 0.1 %
- Carbonyl compounds (CO) max. 5 ppm
- Acetal + Acetaldehyde max. 10 ppm (v/v)
- Substance reducing $KMnO_4$ max. 3 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.1 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2244.2500

ETHANOL ABSOLUTE ANHYDROUS PURISS., BP, PH. EUR., USP (MIN. 99.5 % V/V)

- Density (20 °C) 0.790 – 0.793 g/ml

Specification

- Identity (IR) complies
- Clarity of solution complies
- Acidity or alkalinity max. 30 ppm
- UV absorbance (5 cm, ref. water) complies
- Density (20 °C) 0.790 – 0.793 g/ml complies
- Boiling point 78.0 – 79.0 °C
- Residue on evaporation max. 25 ppm
- Origin (BSE/TSE) vegetable
- Residual solvents (ICH) complies
- Water (KF) max. 0.1 %
- Volatile impurities complies
- Absorbance at 240 nm max. 0.40 AU
- Absorbance from 235 to 340 nm complies
- Absorbance from 250 to 260 nm max. 0.30 AU
- Absorbance from 270 to 340 nm max. 0.10 AU
- Other impurities ppm (v/v) max. 300

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2273.1000
2.5 l	Glass bottle	2273.2500
5 l	Plastic canister	2273.5000
25 l	Plastic canister	2273.9025

ETHANOL ABSOLUTE P. A., ACS, PH. EUR., USP (MIN. 99.9 %)

- Density (20 °C) 0.790 – 0.793 g/ml

Specification

- Appearance of solution clear, colourless
- Identity (IR) complies
- UV absorbance (5 cm, ref. water) complies
- Volatile impurities complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3602 – 1.3622
- Residue on evaporation max. 10 ppm
- Substances darkened by H_2SO_4 complies
- Water (KF) max. 0.1 %
- Acidity (as CH_3COOH) max. 10 ppm
- Alkalinity (as NH_3) max. 1 ppm
- 2-Propanol (C_3H_7OH) max. 30 ppm
- Methanol (CH_3OH) max. 50 ppm
- Benzene (C_6H_6) max. 2 ppm
- Carbonyl compounds (as CO) max. 5 ppm
- Substances reducing $KMnO_4$ max. 3 ppm
- Heavy metals (as Pb) max. 1 ppm
- Aluminium (Al) max. 0.5 ppm
- Boron (B) max. 0.02 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.1 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2246.1000
2.5 l	Glass bottle	2246.2500
5 l	Plastic canister	2246.5000
25 l	Plastic canister	2246.9025

ETHANOL ABSOLUTE FOR HPLC (MIN. 99.9 %)

- Density (20 °C) 0.79 g/ml

Specification

- Refractive index (20 °C) 1.358 – 1.362
- Water (KF) max. 500 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as CH_3COOH) max. 10 mg/kg
- Assay (20 °C) min. 99.9 % v/v
- UV transmittance at 210 nm min. 30.0 %
- UV transmittance at 240 nm min. 80.0 %
- UV transmittance at 250 nm min. 90.0 %
- UV transmittance at 260 nm min. 98.0 %
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2222.1000
2.5 l	Glass bottle	2222.2500

ETHANOL VLSI (MIN. 99.9 %)

- Density (20 °C) 0.79 g/ml

Specification

- Assay (GC, anhydrous basis) 99.9 – 100.0 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.0003 % w/w
- Water (KF) max. 0.05 % w/w
- Acidity (as CH_3COOH) max. 0.002 %
- Alkalinity (as NH_3) max. 0.0005 %
- Chloride (Cl) max. 0.2 ppm
- Phosphate (PO_4) max. 0.3 ppm
- Sulphate (SO_4) max. 0.5 ppm
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 20 ppb
- Arsenic (As) max. 10 ppb
- Gold (Au) max. 10 ppb
- Boron (B) max. 10 ppb
- Barium (Ba) max. 10 ppb
- Beryllium (Be) max. 10 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 30 ppb
- Gallium (Ga) max. 20 ppb
- Germanium (Ge) max. 20 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 20 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 10 ppb
- Molybdenum (Mo) max. 20 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max. 20 ppb
- Silicon (Si) max. 20 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 20 ppb
- Vanadium (V) max. 20 ppb
- Zinc (Zn) max. 30 ppb
- Zirconium (Zr) max. 30 ppb
- Particle count > 0.5 µm max. 100 P/ml
- Particle count > 1.0 µm max. 10 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	2262.2511

ETHANOL ABSOLUTE FOR MOLECULAR BIOLOGY (MIN. 99.8 %)

- Density (20 °C) 0.79 g/ml

Specification

- Melting point -114 °C
- Boiling point 78 °C
- Assay (GC, anhydrous basis) min. 99.8 %
- Acidity (as CH_3COOH) max. 0.002 %
- Colour (APHA) max. 10
- Substances darkened by H_2SO_4 complies
- Residue on evaporation max. 0.001 % w/w
- $KMnO_4$ red. substances complies
- Water (KF) max. 0.2 % w/w
- DNase not detectable
- RNase not detectable
- Protease not detectable

Quantity	Packaging Material	Art. no.
500 ml	Glass bottle	9589.0500
1 l	Glass bottle	9589.1000

ETHANOL DENATURATED WITH MEK, IPA AND BITREX®

- C_2H_5OH
- M = 46.07 g/mol
- CAS-No. 64-17-5
- EC Index No. 603-002-00-5
- EC-No. 200-578-6
- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P240 P241 P260 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Colourless liquid
- Melting point -114.5 °C
- Boiling point >78 °C

BIOETHANOL 96 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 96.0 %)

- Density (20 °C) 0.805 – 0.807 g/ml

Specification

- Refractive index (20 °C) 1.362 – 1.364
- Methanol (CH_3OH) max. 50 mg/dl
- 1-Propanol (C_3H_7OH) max. 10.0 mg/dl
- Methyl ethyl ketone 0.98 – 1.20 l/hl
- Bitrex® 0.98 – 1.20 g/hl
- Fusel oils max. 12.0 mg/dl
- Total acids (as CH_3COOH) max. 1.0 mg/dl
- 2-Propanol (C_3H_7OH) 0.98 – 1.20 l/hl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2209.1000
5 l	Plastic canister	2209.5000
10 l	Plastic canister	2209.9010
25 l	Plastic canister	2209.9025
200 l	Metal drum	2209.9200

BIOETHANOL 99 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 99.2 %)

- Density (20 °C) 0.789 – 0.790 g/ml

Specification

- Refractive index (20 °C) 1.361 – 1.363
- Methanol (CH_3OH) max. 50 mg/dl
- Methyl ethyl ketone 0.98 – 1.20 l/hl
- 2-Propanol (C_3H_7OH) 0.98 – 1.20 l/hl
- Bitrex® 0.98 – 1.20 g/hl
- Fusel oils max. 12.0 mg/dl
- Total acids (as CH_3COOH) max. 1.0 mg/dl
- 1-Propanol (C_3H_7OH) max. 10 mg/dl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2211.1000
5 l	Plastic canister	2211.5000
10 l	Plastic canister	2211.9010
25 l	Plastic canister	2211.9025

METHYLATED SPIRIT (MIN. 96.1 %)

Specification

- Assay 96.1 – 96.9 %
- Density (20 °C) 0.804 – 0.807 g/ml
- Methyl ethyl ketone 1.0 – 1.20 l/hl
- 2-Propanol (C_3H_7OH) 0.98-1.20 l/hl
- Bitrex® max. 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2259.1000
10 l	Plastic canister	2259.9010

ETHANOL 70 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 69.0 %)

- Density (20 °C) 0.883 – 0.888 g/ml

Specification

- Assay 69.0 – 71.0 % v/v
- 2-Propanol (C_3H_7OH) 1.0 – 1.5 l/hl
- Bitrex® 1.0 – 1.5 g/hl
- Methyl ethyl ketone 1.0 – 1.5 l/hl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2202.1000
5 l	Plastic canister	2202.5000
10 l	Plastic canister	2202.9010
25 l	Plastic canister	2202.9025
200 l	Metal drum	2202.9200

ETHANOL 80 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 79.0 %)

- Density (20 °C) 0.857 – 0.862 g/ml

Specification

- Assay 79.0 – 81.0 % v/v
- 2-Propanol (C_3H_7OH) 1.0 – 1.5 l/hl
- Bitrex® 1.0 – 1.5 g/hl
- Methyl ethyl ketone 1.0 – 1.5 l/hl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2203.1000
5 l	Plastic canister	2203.5000

ETHANOL 96 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 96.0 %)

- Density (20 °C) 0.804 – 0.807 g/ml

Specification

- Assay 96.0 – 96.9 % v/v
- 2-Propanol (C_3H_7OH) 1.0 – 1.5 l/hl
- Bitrex® 1.0 – 1.5 g/hl
- Methyl ethyl ketone 1.0 – 1.5 l/hl

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2206.5000
10 l	Plastic canister	2206.9010
25 l	Plastic canister	2206.9025
25 l	Tinplate drum	2206.6025

ETHANOL 99 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 99.7 %)

- Density (20 °C) 0.789 – 0.793 g/ml

Specification

- Reftractive index (25 °C) 1.357 – 1.363
- 2-Propanol (C_3H_7OH) 0.98-1.20 l/hl
- Bitrex® 1.0 – 1.5 g/hl
- Methyl ethyl ketone 1.0 – 1.20 l/hl

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	2236.0500
1 l	Plastic bottle	2236.1000
2.5 l	Plastic canister	2236.2500

ETHANOL 99 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 99.8 %)

- Density (20 °C) 0.789 – 0.791 g/ml

Specification

- Assay min. 99.8 % v/v
- Appearance clear, colourless liquid
- Odour specific
- Methanol (CH_3OH) (before denat.) max. 0.03 % (m/m)
- Bitrex® 1.0 – 1.5 g/hl
- Higher alcohols (before denat.) max. 0.3 % (m/m)
- Total acids (as CH_3COOH) (before denat.) max. 4 mg/100 ml
- Residue on evaporation (before denat.) max. 10 mg/100 ml
- Methyl ethyl ketone 1.0 – 1.5 l/hl
- 2-Propanol (C_3H_7OH) 1.0 – 1.5 l/hl

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2212.5000
10 l	Plastic canister	2212.9010
25 l	Plastic canister	2212.9025
25 l	Tinplate drum	2212.6025

ETHANOL 99 % DENATURED WITH MEK, IPA AND BITREX® (MIN. 99.8 %)

- Density (20 °C) ca. 0.789 g/ml

Specification

- Refractive index (20 °C) 1.356 – 1.366
- Methyl ethyl ketone 1.00 l/hl
- 2-Propanol (C_3H_7OH) 1.00 l/hl
- Bitrex® 1.00 g/hl
- Water max. 0.2 % w/w

Quantity	Packaging Material	Art. no.
157 kg	Metal drum	2252.9157

ETHANOL 99 % DENATURED WITH MEK, IPA AND BITREX® FOR HISTOLOGY (MIN. 99.7 %)

- Density (20 °C) 0.789 – 0.793 g/ml

Specification

- Refractive index (25 °C) 1.357 – 1.363
- Methyl ethyl ketone 0.98 – 120 %
- 2-Propanol (C_3H_7OH) 0.98 – 120 %
- Bitrex® max. 10 ppm
- Residue on evaporation max. 10 ppm
- Total acids max. 0.001 g/l
- Aldehyde max. 0.001 g/l
- Water max. 0.065 g/l
- Methanol (CH_3OH) max. 0.001 g/l

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2255.1000
2.5 l	Plastic canister	2255.2500
5 l	Plastic canister	2255.5000









ETHANOL DENATURATED WITH PETROLEUM ETHER

- C_2H_5OH
- Density (20 °C) 0.807 g/ml
- UN-No. 1170
- ADR 3, II

GHS
- H225 H361f H412
- P210 P233 P243 P280 P303+P361+P353 P308+P313 P403+P235 P501



Specification
- Clear, colourless liquid

ETHANOL 96 % DENATURATED WITH PETROLEUM ETHER (MIN. 96.0 %)

Specification
- Refractive index (20 °C) 1.3620 – 1.3645
- Petroleum ether 0.98 – 1.40 l/hl
- Fusel oils max. 12.0 mg/dl
- Total acids (as CH_3COOH) max. 1.0 mg/dl
- 1-Propanol (C_3H_7OH) max. 10.0 mg/dl

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2248.5000

ETHANOLAMINE

- C_2H_7NO
- M = 61.08 g/mol
- CAS-No. 141-43-5
- EC Index No. 603-030-00-8
- EC-No. 205-483-3
- Density (20 °C) 1.02 g/ml
- UN-No. 2491
- ADR 8, III

GHS
- H302+H312+H332 H314
- P264 P271 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P501



Specification
- Clear, colourless liquid
- Melting point 9.8 – 10.8 °C
- Boiling point 169.5 – 170.5 °C

ETHANOLAMINE FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Water max. 0.25 %
- Sulphated ash max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2163.1000
2.5 l	Glass bottle	2163.2500

ETHANOLAMINE P. A. (MIN. 99.0 %)

Specification
- Assay (alkalimetric) min. 99.0 %
- Identity complies
- Water miscibility complies
- Alcohol miscibility complies
- Refractive index (20 °C) 1.4491 – 1.4591
- Chloride (Cl) max. 10 ppm
- Sulphate (SO_4) max. 20 ppm
- Iron (Fe) max. 1 ppm
- Diethanolamine ($C_4H_{11}NO_2$) max. 0.5 %
- Triethanolamine ($C_6H_{15}NO_3$) max. 0.5 %
- Heavy metals (as Pb) max. 2 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2170.1000

2-ETHOXYETHANOL

- $C_4H_{10}O_2$
- M = 90.12 g/mol
- CAS-No. 110-80-5
- EC Index No. 603-012-00-X
- EC-No. 203-804-1
- Density (20 °C) 0.93 g/ml
- UN-No. 1171
- ADR 3, III

GHS

- H226 H360FD H331 H302
- P201 P210 P271 P280 P302+P352 P308+P313 P501



Specification

- Colourless liquid
- Melting point -100 °C
- Boiling point 135 °C

2-ETHOXYETHANOL FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Hydrogen peroxide (H_2O_2) max. 0.005 %
- Water max. 0.2 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2283.1000
2.5 l	Glass bottle	2283.2500

ETHYL ACETATE

- $CH_3COOC_2H_5$
- M = 88.11 g/mol
- CAS-No. 141-78-6
- EC Index No. 607-022-00-5
- EC-No. 205-500-4
- Density (20 °C) 0.898 – 0.902 g/ml
- UN-No. 1173
- ADR 3, II

GHS

- H225 H319 H336 EUH066
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P405 P501



Specification

- Colourless liquid
- Melting point -83 °C
- Boiling point 76 – 78 °C

ETHYL ACETATE FOR SYNTHESIS (MIN. 99.8 %)

Specification

- Colour (APHA) max. 10
- Identity (IR) complies
- Refractive index (20 °C) 1.3699 – 1.3739
- Acidity (as CH_3COOH) max. 30 ppm
- Residue on evaporation max. 20 ppm
- Water (KF) max. 500 ppm
- Ethanol (C_2H_5OH) max. 0.04 %

Quantity	Packaging Material	Art. no.
5 l	Plastic cansiter	2242.5011

ETHYL ACETATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.05 %
- Free acid max. 0.005 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Ethanol (C_2H_5OH) max. 0.1 %
- Methanol (CH_3OH) max. 0.1 %
- Colour (APHA) max. 10
- Methyl acetate ($C_3H_6O_2$) max. 0.1 %
- Residue on evaporation max. 0.002 %
- Readily carbonisable substances complies
- Acidity max. 0.0009 meq/g
- Substances darkened by H_2SO_4 complies

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2257.2500
2.5 l	Plastic bottle	2257.2511
5 l	Plastic canister	2257.5000

ETHYL ACETATE FOR HPLC (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.370 – 1.374
- Water (KF) max. 200 mg/kg
- Non-volatile substances max. 10 mg/kg
- Free acids (as CH_3COOH) max. 30 mg/kg
- UV transmittance at 260 nm min. 75.0 %
- UV transmittance at 270 nm min. 90.0 %
- UV transmittance at 300 nm min. 95.0 %
- Ethanol (C_2H_5OH) max. 0.04 %
- Methanol (CH_3OH) max. 0.01 %
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2237.1000
2.5 l	Glass bottle	2237.2500

ETHYL ACETATE FOR RESIDUE ANALYSIS (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.370 – 1.374
- Water (KF) max. 300 mg/kg
- Non-volatile substances max. 2 mg/kg
- Free acids (as CH_3COOH) max. 30 mg/kg
- Colour (Hazen) max. 10
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention time atrazine to coumaphos) max. 3 ng/l

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2219.1000
2.5 l	Glass bottle	2219.2500

ETHYL ACETATE FOR LC-MS (MIN. 99.95 %)

Specification

- Identity complies
- Colour (Hazen) max. 10
- Refractive index (20 °C) 1.370 – 1.374
- Water (KF) max. 200 mg/kg
- Residue on evaporation max. 2 mg/kg
- Free acids (as CH_3COOH) max. 0.0030 %
- Free alkali (as NH_3) max. 0.0005 %
- UV transmittance at 260 nm min. 75.0 %
- UV transmittance at 275 nm min. 97.0 %
- UV transmittance at 300 nm min. 98.0 %
- Aluminium (Al) max. 0.000005 %
- Iron (Fe) max. 0.000005 %
- Sodium (Na) max. 0.000005 %
- Magnesium (Mg) max. 0.000005 %
- Calcium (Ca) max. 0.000005 %
- Potassium (K) max. 0.000005 %
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2278.1000

ETHYL ACETATE FOR UHPLC-MS (MIN. 99.9 %)

Specification

- Assay (GC, on anhydrous basis) 99.9 – 100 %
- Colour (APHA) max. 10
- Water (KF) max. 0.02 % w/w
- Residue on evaporation max. 0.0003 % w/w
- LC-MS suitability test (reserpine) max. 30 ppb
- Absorption at 255 nm max. 0.60 AU
- Absorption at 260 nm max. 0.10 AU
- Absorption at 275 nm max. 0.01 AU
- Fluorescence (as quinine) at 254 nm max. 2.0 ppb
- Fluorescence (as quinine) at 365 nm max. 1.0 ppb
- Acidity max. 0.0002 meq/g
- Alkalinity max. 0.0005 meq/g
- Silver (Ag) max. 50 ppb
- Aluminium (Al) max. 20 ppb
- Barium (Ba) max. 50 ppb
- Bismuth (Bi) max. 50 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 50 ppb
- Cobalt (Co) max. 20 ppb
- Chromium (Cr) max. 20 ppb
- Iron (Fe) max. 20 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 20 ppb
- Molybdenum (Mo) max. 50 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 20 ppb
- Lead (Pb) max. 20 ppb
- Tin (Sn) max. 50 ppb
- Strontium (Sr) max. 50 ppb
- Zinc (Zn) max. 50 ppb
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	2279.2500

ETHYLENEDIAMINE

- $C_2H_8N_2$
- M = 60.1 g/mol
- CAS-No. 107-15-3
- EC Index No. 612-006-00-6
- EC-No. 203-468-6
- Density 0.890 – 0.906 g/ml
- UN-No. 1604
- ADR 8 (3), II

GHS

- H226 H302+H312 H314 H317 H334
- P210 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P501



Specification

- Clear, colourless liquid
- Melting point 10 – 12 °C
- Boiling point 115.8 – 117.3 °C

ETHYLENEDIAMINE P. A. (MIN. 98.0 %)

Specification

- Identity complies
- Alcohol miscibility complies
- Refractive index (20 °C) 1.4470 – 1.4570
- Heavy metals (as Pb) max. 5 ppm
- Residue on ignition max. 100 ppm
- Iron (Fe) max. 5 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2175.1000

ETHYLENEDIAMINETETRAACETIC ACID DISODIUM SALT DIHYDRATE (EDTA DISODIUM SALT)

- $C_{10}H_{14}N_2Na_2O_8 \times 2\ H_2O$
- M = 372.24 g/mol
- CAS-No. 6381-92-6
- EC-No. 205-358-3

GHS

- H332 H373
- P260 P314



Specification

- Colourless powder
- Melting point 252°C

EDTA DISODIUM SALT DIHYDRATE PURISS., DAB, PH. EUR., BP, PH. NORD., FCC (99.0 – 101.0 %)

Specification

- Identity complies
- Appearance of solution clear and colourless
- Arsenic (As) max. 0.0001 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.001 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.004 %
- Cyanide (CN) max. 0.0001 %
- Sulphate (SO_4) max. 0.05 %
- pH (1%, H_2O) 4.3 – 4.7
- pH (5%, H_2O) 4.0 – 5.0
- Calcium (Ca) complies
- Nitrilotriacetic acid ($C_6H_9NO_6$) max. 0.1 %
- Methanol (CH_3OH) max. 0.3 %
- Loss on drying 8.7 – 11.4 %
- Sulfated ash 37.0 – 39.0 %
- Residual solvents (Ph. Eur./ICH) not existent

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2216.1000
5 kg	Plastic bottle	2216.5000

EDTA DISODIUM SALT DIHYDRATE P. A., ACS, ISO (99.0 – 101.0 %)

Specification

- Heavy metals (as Pb) max. 0.0005 %
- Copper (Cu) max. 0.0001 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.001 %
- Insoluble matter max. 0.003 %
- Chloride (Cl) max. 0.004 %
- Cyanide (CN) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %
- pH (5 %, 25 °C) 4 – 5
- Nitrilotriacetic acid ($C_6H_9NO_6$) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2281.1000

EDTA Disodium salt solution → see page 177
EDTA Disodium salt volumetric solution → see page 191

ETHYLENE GLYCOL

- $C_2H_6O_2$
- M = 62.07 g/mol
- CAS-No. 107-21-1
- EC Index No. 603-027-00-1
- EC-No. 203-473-3
- Density 1.11 g/ml

GHS
- H302 H373
- P270 P301+P312 P314 P501



Specification
- Colourless liquid
- Boiling point 200 °C

ETHYLENE GLYCOL P. A., ACS, PH. EUR., USP (MIN. 99.5 %)

Specification
- Water max. 0.1 %
- Iron (Fe) max. 0.00005 %
- Substances reducing $KMnO_4$ max. 0.0003 %
- Chloride (Cl) max. 0.00002 %
- Sulphated ash max. 0.005 %

Quantity	Packaging Material	Art. no.
25 l	Plastic canister	2282.9025

ETHYLENE GLYCOL MONOBUTYL ETHER

- $C_6H_{14}O_2$
- M = 118.18 g/mol
- CAS-No. 111-76-2
- EC Index No. 603-014-00-0
- EC-No. 203-905-0
- Density (20 °C) 0.897 – 0.905 g/ml

GHS
- H302+H332 H315 H319
- P312 P501



Specification
- Clear, colourless liquid
- Boiling point 167 – 172 °C

ETHYLENE GLYCOL MONOBUTYL ETHER FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Identity complies
- Refractive index (20 °C) 1.4167 – 1.4207
- Residue on evaporation max. 50 ppm
- Water (KF) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2269.1000

FORMALDEHYDE SOLUTION

- HCHO

Specification
- Colourless liquid

FORMALDEHYDE SOLUTION 4 % PHOSPHATE BUFFERED (3.5 – 4.5 % (STAB.))

- Density (20 °C) 1.015 – 1.025 g/ml

GHS
- H317 H341 H350
- P261 P280 P308+P313 P405 P501



Specification
- Refractive index (20 °C) 1.330 – 1.350
- pH (20 °C) 7.0 – 7.4
- Stabilized with methanol
- For histological use
- Biocide, Reg. No. N-92163

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2134.5000

FORMALDEHYDE SOLUTION 4.5 % PHOSPHATE BUFFERED (4.0 – 5.0 % (STAB.))

- Density (20 °C) 1.016 – 1.019 g/ml

GHS

- H317 H341 H350
- P261 P280 P308+P313 P405 P501



Specification

- Refractive index (20 °C) 1.330 – 1.350
- pH (20 °C) 7.0 – 7.4
- Stabilized with methanol
- For histological use
- Biocide, Reg. No. N-92164

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2135.1000
5 l	Plastic canister	2135.5000
10 l	Plastic canister	2135.9010

FORMALDEHYDE SOLUTION FOR SYNTHESIS (MIN. 37.0 % W/W (STAB.))

- Density 1.09 g/ml
- UN-No. 2209
- ADR 8, III

GHS

- H301+H311+H331 H314 H317 H341 H350 H370
- P201 P260 P280 P301+P310 P303+P361+P353 P305+P351+P338 P308+P311 P403+P233 P501



Specification

- Residue on ignition max. 0.01 %
- Free acid max. 0.05 %
- Methanol (CH_3OH) 9 – 11 %
- Stabilized with methanol

Quantity	Packaging Material	Art. no.
10 l	Plastic canister	2100.9010

FORMALDEHYDE SOLUTION P. A., ACS, ISO (MIN. 37.0 % W/W (STAB.))

- Density (20 °C) 1.075 – 1.090 g/ml
- UN-No. 2209
- ADR 8, III

GHS

- H301+H311+H331 H314 H317 H341 H350 H370
- P201 P260 P280 P301+P310 P303+P361+P353 P305+P351+P338 P308+P311 P403+P233 P501



Specification

- Melting point -118 °C
- Boiling point 97 °C
- Sulphated ash max. 0.005 %
- Free acid max. 0.03 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0002 %
- Chloride (Cl) max. 0.0001 %
- Sulphate (SO_4) max. 0.002 %
- Colour (APHA) max. 10
- Lead (Pb) max. 0.0002 %
- Residue on evaporation max. 0.005 %
- Acidity max. 0.006 meq/g
- Stabilized with methanol 9 – 11 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2137.1011
2.5 l	Plastic bottle	2137.2511
25 l	Plastic canister	2137.9025

FORMAMIDE

- CH_3NO
- M = 45.04 g/mol
- CAS-No. 75-12-7
- EC Index No. 616-052-00-8
- EC-No. 200-842-0
- Density 1.13 g/ml

GHS

- H360D
- P201 P280 P308+P313 P501



Specification

- Colourless liquid
- Melting point 2.0 °C
- Boiling point 210.0 °C

FORMAMIDE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- pH (200 g/l H_2O) 4.0 – 5.0
- Chloride (Cl) max. 0.0001 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Iron (Fe) max. 0.0001 %
- Lead (Pb) max. 0.0001 %
- Zinc (Zn) max. 0.0001 %
- Water max. 0.1 %
- Formic acid (HCOOH) max. 0.02 %
- Ammonium acetate (CH_3COONH_4) max. 0.1 %
- Non-volatile substances max. 0.005 %
- Colour (APHA) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2140.1000
5 l	Aluminum can	2140.5000

FORMIC ACID

- HCOOH
- M = 46.03 g/mol
- CAS-No. 64-18-6
- EC Index No. 607-001-00-0
- EC-No. 200-579-1
- Density 1.220 – 1.221 g/ml
- UN-No. 1779
- ADR 8 (3), II

GHS

- H226 H302 H331 H314 EUH071
- P210 P260 P280 P301+P312 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P403+P233 P501



Specification

- Colourless liquid
- Melting point -4 – -8 °C
- Boiling point 101 °C

FORMIC ACID 98 – 100 % PURISS. (MIN. 99.0 %)

Specification

- Assay (titr.) min. 99.0 %
- Acetic acid (CH_3COOH) max. 0.005 %
- Chloride (Cl) max. 0.0001 %
- Sulphate (SO_4) max. 0.0001 %
- Iron (Fe) max. 0.0001 %
- Other heavy metals max. 0.0001 %
- Residue on evaporation max. 0.002 %

Quantity	Packaging Material	Art. no.
8 l	Plastic canister	DG1250.9008
9.5 l	Plastic canister	DG1250.9095

FORMIC ACID 99 – 100 % P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Ammonium (NH_4) max. 0.001 %
- Silver (Ag) max. 0.000002 %
- Aluminium (Al) max. 0.000005 %
- Barium (Ba) max. 0.000002 %
- Beryllium (Be) max. 0.000002 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.00002 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.0002 %
- Germanium (Ge) max. 0.000005 %
- Potassium (K) max. 0.00001 %
- Lithium (Li) max. 0.000002 %
- Magnesium (Mg) max. 0.00005 %
- Manganese (Mn) max. 0.000005 %
- Molybdenum (Mo) max. 0.000002 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.000005 %
- Lead (Pb) max. 0.000002 %
- Strontium (Sr) max. 0.000002 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Vanadium (V) max. 0.000005 %
- Zinc (Zn) max. 0.000005 %
- Zirconium (Zr) max. 0.00001 %
- Chloride (Cl) max. 0.0005 %
- Oxalate (C_2O_4) max. 0.005 %
- Sulphate (SO_4) max. 0.0005 %
- Sulphite (SO_3) max. 0.001 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.003 %
- Heavy metals (as Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2694.1011

D-(+)-GLUCOSE

- $C_6H_{12}O_6$
- M = 180.16 g/mol
- CAS-No. 50-99-7
- EC-No. 200-075-1
- Density 1.65 g/ml

Specification

- White solid

D-(+)-GLUCOSE ANHYDROUS PURISS., DAB, PH. EUR., BP, PH. FRANÇ. (MIN. 99 %)

Specification

- Water max. 1 %
- Residue on ignition max. 0.1 %
- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.02 %
- Lead (Pb) max. 0.00005 %
- Chloride (Cl) max. 0.01 %
- Sulphate (SO_4) max. 0.02 %
- Sulphite (SO_3) max. 0.001 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	9375.0250

GLYCEROL

- $C_3H_8O_3$
- M = 92.09 g/mol
- CAS-No. 56-81-5
- EC-No. 200-289-5
- Density 1.26 g/ml

Specification

- Colourless liquid
- Melting point 18 °C
- Boiling point 290 °C

GLYCEROL ANHYDROUS PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP, FCC, E422 (MIN. 99.0 %)

Specification

- Water max. 2.0 %
- Residue on ignition max. 0.01 %
- Acidity complies
- Alkalinity complies
- Arsenic (As) max. 0.0001 %
- Copper (Cu) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max.0.001 %
- Sulphate (SO_4) max. 0.001 %
- Reducing substances max. 0.0005 %
- 1,2,4-Butanetriol ($C_4H_7(OH)_3$) max. 0.2 %
- Refractive index (20 °C) 1.470 – 1.475
- Aldehydes max. 0.001 %
- Halogenated substances max. 0.0035 %
- Appearance of the solution clear
- Sugars according to Ph. Eur.
- Vegetable origin.

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2039.1000
25 l	Plastic canister	2039.9025

GLYCEROL ANHYDROUS P. A., ACS (MIN. 99.0 %)

Specification

- Water max. 1 %
- Colour (Hazen) max. 10
- Acidity max. 0.05 meq/g
- Alkalinity max. 0.03 meq/g
- Sulphated ash max. 0.005 %
- Ammonium (NH_4) max. 0.0005 %
- Arsenic (As) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0001 %
- Iron (Fe) max. 0.0001 %
- Chloride (Cl) max. 0.0001 %
- Sulphate (SO_4) max. 0.0005 %
- Readily carbonisable substances complies
- Fatty acid esters max. 0.05 %
- Glyceraldehyde ($C_3H_6O_3$) max. 0.003 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2050.1011

GLYCEROL ANHYDROUS P. A. (MIN. 99.5 %)

Specification

- Water max. 0.5 %
- Colour (Hazen) max. 8
- Sulphated ash max. 0.01 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Halogen compounds max. 0.0035 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2036.1000

GLYCEROL (PROPAN-1,2,3-TRIOL) FOR MICROBIOLOGY AND MOLECULAR BIOLOGY (MIN. 99.0 %)

Specification

- Water max. 0.5 %
- Identity (IR) complies
- Absorption at 260 nm max. 0.07 AU
- Absorption at 280 nm max. 0.02 AU
- Heavy metals (as Pb) max. 2 ppm
- DNase, RNase, Protease not detectable
- Note: methods according to Ph. Eur.

Quantity	Packaging Material	Art. no.
100 ml	Plastic bottle	8110.0100

GLYCINE

- $C_2H_5NO_2$
- M = 75.07 g/mol
- CAS-No. 56-40-6
- EC-No. 200-272-2
- Density 1.16 g/ml

Specification

- White crystalline powder
- Melting point 232 °C (decomposition)

GLYCINE P. A. (MIN. 99.5 %)

Specification

- Loss on drying (110 °C) max. 0.2 %
- Foreign amino acids max. 0.1 %
- Ammonium (NH_4) max. 0.02 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Arsenic (As) max. 0.0001 %
- Iron (Fe) max. 0.0005 %
- pH (5 %, 20 °C) 5,9 – 6,4

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	9366.1000

More information about Green Solvents → see page 282

HEPTANE

- C_7H_{16}
- EC Index No. 601-008-00-2
- EC-No. 205-563-8
- Density (15 °C) 0.700 – 0.725 g/ml
- UN-No. 1206
- ADR 3, II

GHS
- H225 H304 H315 H336 H410
- P210 P243 P261 P271 P273 P280 P301+P310 P303+P361+P353 P304+P340 P312 P331 P403+P233 P501



Specification
- Clear, colourless liquid
- Boiling point 94 – 100 °C

HEPTANE TECHNICAL GRADE (MIN. 28.0 % W/W)

Specification
- Mixture of isomers
- Refractive index (20 °C) 1.390 – 1.410
- n-Heptane (C_7H_{16}) min. 28.0 % w/w
- Colour (Saybolt) min. 30
- Aromatic compounds max. 100 ppm
- Benzene (C_6H_6) max. 15 ppm

Quantity	Packaging Material	Art. no.
200 l	Metal drum	1966.9200

N-HEPTANE

- C_7H_{16}
- M = 100.21 g/mol
- CAS-No. 142-82-5
- EC Index No. 601-008-00-2
- EC-No. 205-563-8
- Density (20 °C) 0.679 – 0.689 g/ml
- UN-No. 1206
- ADR 3, II

GHS
- H225 H304 H315 H336 H410
- P210 P243 P261 P271 P273 P280 P301+P310 P303+P361+P353 P304+P340 P312 P331 P403+P233 P501



Specification
- Clear, colourless liquid
- Melting point -90.5 °C
- Boiling point 97.0 – 99.4 °C

N-HEPTANE FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3826 – 1.3926
- Water (KF) max. 150 ppm
- Residue on evaporation max. 20 ppm
- Acidity (as CH_3COOH) max. 10 ppm
- Total sulphur (S) max. 5 ppm
- Aromatic compounds max. 50 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1900.1000

N-HEPTANE PURISS. (MIN. 99.0 %)

Specification
- Non-volatile substances max. 0.005 %
- Free acid max. 0.005 %
- Water max. 0.02 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1935.1000

N-HEPTANE P. A. (MIN. 99.0 %)

Specification
- Identity (IR) complies
- Refractive index (20 °C) 1.386 – 1.390
- Density (d 20/4) 0.681 – 0.687
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 10 mg/kg
- Free acid (as CH_3COOH) max. 10 mg/kg
- Aromatic compounds max. 50 mg/kg
- Total sulphur (S) max. 10 ppm
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1948.1000
2.5 l	Glass bottle	1948.2500
25 l	Metal drum	1948.9025

N-HEPTANE FOR HPLC (MIN. 99.2 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3836 – 1.3916
- Water (KF) max. 100 ppm
- Residue on evaporation max. 5 ppm
- Acidity or alkalinity max. 0.00015 meq/g
- UV transmittance at 200 nm min. 20.0 %
- UV transmittance at 210 nm min. 55.0 %
- UV transmittance at 220 nm min. 80.0 %
- UV transmittance at 230 nm min. 92.0 %
- UV transmittance at 240 nm min. 96.0 %
- UV transmittance at 250 nm min. 98.0 %
- UV transmittance at 260 nm min. 99.0 %
- Aromatic compounds max. 5 ppm
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1968.2500

N-HEPTANE FOR PESTICIDE ANALYSIS (MIN. 99.0 %)

Specification

- Identity (IR) complies
- Water (KF) max. 50 mg/kg
- Free acid (as HCOOH) max. 10 ppm
- Non-volatile residue max. 5 ppm
- Total sulphur (S) max. 5 ppm
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1907.2500

N-HEPTANE ACC. TO ASTM D2699/D2700 (MIN. 99.75 %)

Specification

- Isooctane (C_8H_{18}) max. 0.1 %
- Lead (Pb) max. 0.002 g/gal
- Colour (Saybolt) min. 30

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1978.2500

HEPTANE-1-SULFONIC ACID SODIUM SALT

- $CH_3(CH_2)_6SO_3Na$
- M = 202.25 g/mol
- CAS-No. 22767-50-6
- EC-No. 245-210-5

Specification

- White, crystalline powder

HEPTANE-1-SULFONIC ACID SODIUM SALT (MIN. 99.0 %)

Specification

- Identity complies
- Loss on drying max. 2.0 %
- pH (10 % solution) 5.5 – 7.5
- Absorption at 200 nm (0.25 M) max. 0.1 AU
- Absorption at 210 nm (0.25 M) max. 0.05 AU
- Absorption at 220 nm (0.25 M) max. 0.04 AU
- Absorption at 230 nm (0.25 M) max. 0.03 AU
- Absorption at 240 nm (0.25 M) max. 0.01 AU
- Absorption at 250 nm (0.25 M) max. 0.01 AU
- Absorption at 260 nm (0.25 M) max. 0.01 AU

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1906.0025

HEXAFLUORO-2-PROPANOL

- $CF_3CH(OH)CF_3$
- M = 168.04 g/mol
- CAS-No. 920-66-1
- EC-No. 213-059-4
- Density (20 °C) ~1.6 g/ml
- UN-No. 3265
- ADR 8, II

GHS

- H302+H312+H332 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P501



Specification

- Colourless liquid
- Melting point -3.4 °C
- Boiling point 58.2 °C

HEXAFLUORO-2-PROPANOL P. A. (MIN. 99.0 %)

Specification

- Identity (IR) complies
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
100 ml	Glass bottle	1909.0100
500 ml	Glass bottle	1909.0500

N-HEXANE

- C_6H_{14}
- M = 86.18 g/mol
- CAS-No. 110-54-3
- EC Index No. 601-037-00-0
- EC-No. 203-777-6
- Density 0.655 – 0.665 g/ml
- UN-No. 1208
- ADR 3, II

GHS

- H225 H304 H315 H336 H361f H373 H411
- P201 P202 P210 P241 P242 P243 P260 P264 P271 P273 P281 P301+P310 P303+P361+P353 P304+P340 P308+P313 P331 P403+P233 P501



Specification

- Colourless liquid
- Melting point -94 °C
- Boiling point 67.0 – 69.0 °C

N-HEXANE FOR SYNTHESIS (MIN. 95.0 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3699 – 1.3799
- Residue on evaporation max. 20 ppm
- Aromatic compounds max. 50 ppm
- Water (KF) max. 100 ppm
- Acidity (as $C_6H_{12}O_2$) max. 40 ppm
- Thiophene (C_4H_4S) complies
- Total sulphur (S) max. 5 ppm
- Colour (APHA) max. 10

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1980.1000
2.5 l	Glass bottle	1980.2500

N-HEXANE P. A., ACS, PH. EUR. (MIN. 95.0 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.375 – 1.376
- Residue on evaporation max. 10 ppm
- Aromatic compounds max. 10 ppm
- Water-soluble, titratable acid max. 0.0003 meq/g
- Substances reducing $KMnO_4$ max. 20 ppm
- Thiophene (C_4H_4S) complies
- Total sulphur (S) max. 5 ppm
- Assay (hexan isomer and methylcyclo-pentane) min. 98.5 %
- Aluminium (Al) max. 0.5 ppm
- Copper (Cu) max. 0.01 ppm
- Iron (Fe) max. 0.1 ppm
- Nickel (Ni) max. 0.01 ppm
- Lead (Pb) max. 0.01 ppm
- Zinc (Zn) max. 0.01 ppm
- Water (KF) max. 100 ppm
- Colour (APHA) max. 10
- Readily carbonisable substances complies
- Alcohol miscibility complies
- Diethyl ether miscibility complies
- Chloroform miscibility complies

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	1975.5011

N-HEXANE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.002 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Aromatic compounds max. 0.01 %
- Total sulphur (S) max. 0.005 %
- Thiophene (C_4H_4S) max. 0.0005 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.001 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1929.1000
2.5 l	Glass bottle	1929.2500
25 l	Metal drum	1929.9025

N-HEXANE FOR HPLC (MIN. 96.0 %)

Specification

- Refractive index (20 °C) 1.373 – 1.377
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 5 mg/kg
- Aromatic compounds max. 10 mg/kg
- UV transmittance at 220 nm min. 82.0 %
- UV transmittance at 230 nm min. 92.0 %
- UV transmittance at 245 nm min. 98.0 %
- Total sulphur (S) max. 5 mg/kg
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1964.1000
2.5 l	Glass bottle	1964.2500

N-HEXANE FOR RESIDUE ANALYSIS (MIN. 95.0 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.373 – 1.377
- Water (KF) max. 150 mg/kg
- Non-volatile substances max. 5 mg/kg
- Colour (APHA) max. 10
- GC-ECD: Peak (lindane) (Retention range trichlorobenzene to mirex) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1973.1000
2.5 l	Glass bottle	1973.2500

HEXANE-1-SULFONIC ACID SODIUM SALT

- $CH_3(CH_2)_5SO_3Na$
- M = 188.22 g/mol
- CAS-No. 2832-45-3
- EC-No. 220-601-3

GHS

- H315 H317 H319 H334
- P264 P280 P284 P304+P340 P305+P351+P338 P342+P311 P501

Danger



Specification

- White, crystalline powder

HEXANE-1-SULFONIC ACID SODIUM SALT (MIN. 99.0 %)

Specification

- Water (KF) max. 2.0 %
- Absorption at 200 nm (0.25 M) max. 0.1 AU
- Absorption at 210 nm (0.25 M) max. 0.05 AU
- Absorption at 220 nm (0.25 M) max. 0.04 AU
- Absorption at 230 nm (0.25 M) max. 0.03 AU
- Absorption at 240 nm (0.25 M) max. 0.01 AU
- Absorption at 250 nm (0.25 M) max. 0.01 AU
- Absorption at 260 nm (0.25 M) max. 0.01 AU

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1905.0025

HYDROCHLORIC ACID

- M = 36.46 g/mol

Specification

- Clear, colourless to yellowish liquid

HYDROCHLORIC ACID TECHNICAL GRADE (9.0 – 11.0 %)

- HCl
- Density (20 °C) 1.05 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H315 H319 H335
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P390 P501



Specification

- Boiling point ~85 °C
- Iron (Fe) max. 5 mg/kg
- Sulphate (SO_4) max. 500 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	839.2511
5 l	Plastic canister	839.5000
10 l	Plastic canister	839.9010
25 l	Plastic canister	839.9025

HYDROCHLORIC ACID TECHNICAL GRADE (14.0 – 16.0 %)

- HCl
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Iron (Fe) max. 5 mg/kg
- Sulphate (SO_4) max. 500 ppm

Quantity	Packaging Material	Art. no.
5kg	Plastic canister	869.5000
10 kg	Plastic canister	869.9010
25 kg	Plastic canister	869.9025

HYDROCHLORIC ACID 18.5 % (MIN. 18.0 %)

- HCl
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Iron (Fe) max. 5 mg/kg
- Sulphate (SO_4) max. 500 ppm
- Fluoride (F) max. 10 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	810.2500

HYDROCHLORIC ACID TECHNICAL GRADE (30.0 – 33.0 %)

- HCl
- Density 1.15 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Melting point -40 – -25 °C
- Boiling point ~85 °C
- Iron (Fe) max. 5 mg/kg
- Sulphate (SO_4) max. 500 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	889.2511
5 l	Plastic canister	889.5000
10 l	Plastic canister	889.9010

HYDROCHLORIC ACID INHIBITED (MIN. 20.0 %)

- HCl
- Density 1.10 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Inhibited with 3.5 g hexamethylenetetramine

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	807.1000

HYDROCHLORIC ACID PURE, TECHNICAL GRADE (MIN. 20.0 %)

- HCl
- Density 1.10 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Residue on ignition max. 0.0005 %
- Arsenic (As) max. 0.000005 %
- Cadmium (Cd) max. 0.000001 %
- Copper (Cu) max. 0.000005 %
- Iron (Fe) max. 0.00005 %
- Lead (Pb) max. 0.000005 %
- Zinc (Zn) max. 0.0001 %
- Free Chlorine (Cl_2) max. 0.00005 %
- Sulphate (SO_4) max. 0.0001 %
- Sulphite (SO_3) max. 0.0002 %
- Ammonium (NH_4) max. 0.0003 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	820.2511

HYDROCHLORIC ACID PURISS. (MIN. 25.0 %)

- HCl
- Density 1.12 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Residue on ignition max. 0.002 %
- Arsenic (As) max. 0.00005 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0001 %
- Chloride (Cl) max.0.0001 %
- Sulphate (SO_4) max. 0.0002 %
- Sulphite (SO_3) max. 0.0005 %
- Residue on evaporation max. 0.005 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	825.2511

HYDROCHLORIC ACID P. A., PH. EUR., USP (MIN. 25.0 %)

- HCl
- Density 1.12 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Appearance of solution complies
- Residue on ignition max. 0.0005 %
- Residue on evaporation max. 0.005 %
- Colour (APHA) max. 10
- Aluminium (Al) max. 0.000005 %
- Arsenic (As) max. 0.000001 %
- Barium (Ba) max. 0.000002 %
- Beryllium (Be) max. 0.00002 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000001 %
- Cobalt (Co) max. 0.000001 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00002 %
- Germanium (Ge) max. 0.000005 %
- Potassium (K) max. 0.00001 %
- Lithium (Li) max. 0.000001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000001 %
- Molybdenum (Mo) max. 0.000002 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.00002 %
- Lead (Pb) max. 0.000002 %
- Strontium (Sr) max. 0.000001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Vanadium (V) max. 0.000001 %
- Zinc (Zn) max. 0.000005 %
- Zirconium (Zr) max. 0.00001 %
- Bromide (Br) max. 0.005 %
- Free chlorine (Cl_2) max. 0.00005 %
- Sulphate (SO_4) max. 0.0001 %
- Sulphite (SO_3) max. 0.0001 %
- Ammonium (NH_4) max. 0.0001 %
- Mercury (Hg) max. 0.000004%
- Heavy metals (as Pb) max. 0.0001 %
- Solvent residues process technically excluded

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	892.1011
2.5 l	Glass bottle	892.2500
2.5 l	Plastic bottle	892.2511
25 l	Plastic canister	892.9025

HYDROCHLORIC ACID P. A., ISO, PH. EUR. (MIN. 32.0 %)

- HCl
- Density 1.16 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Melting point -40 °C
- Residue on ignition max. 0.0005 %
- Ammonium (NH_4) max. 0.0001 %
- Aluminium (Al) max. 0.000005 %
- Arsenic (As) max. 0.000001 %
- Barium (Ba) max. 0.000002 %
- Bismuth (Bi) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000001 %
- Cobalt (Co) max. 0.000001 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00002 %
- Germanium (Ge) max. 0.000005 %
- Potassium (K) max. 0.00001 %
- Lithium (Li) max. 0.000001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000001 %
- Molybdenum (Mo) max. 0.000002 %
- Sodium (Na) max. 0.00005 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000002 %
- Strontium (Sr) max. 0.000001 %
- Titanium (Ti) max. 0.00001 %
- Thallium (Tl) max. 0.000005 %
- Vanadium (V) max. 0.000001 %
- Zinc (Zn) max. 0.000005 %
- Zirconium (Zr) max. 0.00001 %
- Bromide (Br) max. 0.005 %
- Free chlorine (Cl_2) max. 0.00005 %
- Phosphate (PO_4) max. 0.00005 %
- Sulphate (SO_4) max. 0.0001 %
- Sulphite (SO_3) max. 0.0001 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	871.1000
2.5 l	Glass bottle	871.2500
2.5 l	Plastic bottle	871.2511

HYDROCHLORIC ACID P. A. (MIN. 37.0 %)

- HCl
- Density 1.17 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Melting point -40 – -25 °C
- Boiling point ~85 °C
- Residue on ignition max. 0.0005 %
- Sulphate (SO_4) max. 0.0001 %
- Sulphite (SO_3) max. 0.0002 %
- Free chlorine (Cl_2) max. 0.00005 %
- Ammonium (NH_4) max. 0.0003 %
- Arsenic (As) max. 0.000005 %
- Zinc (Zn) max. 0.0001 %
- Cadmium (Cd) max. 0.000001 %
- Lead (Pb) max. 0.000005 %
- Iron (Fe) max. 0.00005 %
- Copper (Cu) max. 0.000005 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	836.1000
2.5 l	Glass bottle	836.2500
2.5 l	Plastic bottle	836.2511
5 l	Plastic bottle	836.5000
20 l	Plastic canister	836.9020

HYDROCHLORIC ACID SUPERPURE FOR TRACE ANALYSIS (34.0 – 37.0 % W/W)

- HCl

- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Colour (APHA) max. 10
- Bromide (Br) max. 10 ppm
- Free chlorine (Cl_2) max. 0.5 ppm
- Total phosphorus (P) max. 0.01 ppm
- Total sulphur (S) max. 0.3 ppm
- Aluminium (Al) max. 1 ppb
- Antimony (Sb) max. 0.5 ppb
- Arsenic (As) max. 0.5 ppb
- Barium (Ba) max. 0.1 ppb
- Beryllium (Be) max. 0.1 ppb
- Bismuth (Bi) max. 0.1 ppb
- Boron (B) max. 1 ppb
- Cadmium (Cd) max. 0.1 ppb
- Calcium (Ca) max. 1 ppb
- Cerium (Ce) max. 0.1 ppb
- Caesium (Cs) max. 0.1 ppb
- Chromium (Cr) max. 0.5 ppb
- Cobalt (Co) max. 0.1 ppb
- Copper (Cu) max. 0.5 ppb
- Dysprosium (Dy) max. 0.1 ppb
- Erbium (Er) max. 0.1 ppb
- Europium (Eu) max. 0.1 ppb
- Gadolinium (Gd) max. 0.1 ppb
- Gallium (Ga) max. 0.1 ppb
- Gold (Au) max. 0.5 ppb
- Hafnium (Hf) max. 0.1 ppb
- Holmium (Ho) max. 0.1 ppb
- Indium (In) max. 0.1 ppb
- Iron (Fe) max. 1 ppb
- Lanthanum (La) max. 0.1 ppb
- Lead (Pb) max. 0.1 ppb
- Lithium (Li) max. 0.1 ppb
- Magnesium (Mg) max. 0.5 ppb
- Manganese (Mn) max. 0.1 ppb
- Mercury (Hg) max. 0.1 ppb
- Molybdenum (Mo) max. 0.1 ppb
- Neodymium (Nd) max. 0.1 ppb
- Nickel (Ni) max. 0.5 ppb
- Niobium (Nb) max. 0.1 ppb
- Potassium (K) max. 1 ppb
- Praseodymium (Pr) max. 0.1 ppb
- Rhenium (Re) max. 0.1 ppb
- Rhodium (Rh) max. 0.1 ppb
- Rubidium (Rb) max. 0.1 ppb
- Ruthenium (Ru) max. 0.1 ppb
- Samarium (Sm) max. 0.1 ppb
- Scandium (Sc) max. 0.1 ppb
- Selenium (Se) max. 1 ppb
- Silver (Ag) max. 1 ppb
- Sodium (Na) max. 1 ppb
- Strontium (Sr) max. 0.1 ppb
- Tellurium (Te) max. 0.1 ppb
- Terbium (Tb) max. 0.1 ppb
- Thallium (Tl) max. 0.1 ppb
- Thorium (Th) max. 0.1 ppb
- Thulium (Tm) max. 0.1 ppb
- Tin (Sn) max. 0.5 ppb
- Titanium (Ti) max. 0.5 ppb
- Tungsten (W) max. 0.1 ppb
- Uranium (U) max. 0.1 ppb
- Vanadium (V) max. 0.5 ppb
- Ytterbium (Yb) max. 0.1 ppb
- Yttrium (Y) max. 0.1 ppb
- Zinc (Zn) max. 1 ppb
- Zirconium (Zr) max. 0.1 ppb

Quantity	Packaging Material	Art. no.
1 l	Plastic botttle	857.1011



HYDROCHLORIC ACID SUPERPURE (PPB GRADE) (29.0 – 31.0 % W/W)

- HCl
- Density 1.15 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Colour (APHA) max. 10
- Bromide (Br) max. 10 ppm
- Free chlorine (Cl_2) max. 0.5 ppm
- Total phosphorus (P) max. 0.01 ppm
- Total sulphur (S) max. 0.3 ppm
- Aluminium (Al) max. 1 ppb
- Antimony (Sb) max. 0.5 ppb
- Arsenic (As) max. 0.5 ppb
- Barium (Ba) max. 0.1 ppb
- Beryllium (Be) max. 0.1 ppb
- Bismuth (Bi) max. 0.1 ppb
- Boron (B) max. 1 ppb
- Cadmium (Cd) max. 0.1 ppb
- Calcium (Ca) max. 1 ppb
- Cerium (Ce) max. 0.1 ppb
- Caesium (Cs) max. 0.1 ppb
- Chromium (Cr) max. 0.5 ppb
- Cobalt (Co) max. 0.1 ppb
- Copper (Cu) max. 0.5 ppb
- Dysprosium (Dy) max. 0.1 ppb
- Erbium (Er) max. 0.1 ppb
- Europium (Eu) max. 0.1 ppb
- Gadolinium (Gd) max. 0.1 ppb
- Gallium (Ga) max. 0.1 ppb
- Gold (Au) max. 0.5 ppb
- Hafnium (Hf) max. 0.1 ppb
- Holmium (Ho) max. 0.1 ppb
- Indium (In) max. 0.1 ppb
- Iron (Fe) max. 1 ppb
- Lanthanum (La) max. 0.1 ppb
- Lead (Pb) max. 0.1 ppb
- Lithium (Li) max. 0.1 ppb
- Magnesium (Mg) max. 0.5 ppb
- Manganese (Mn) max. 0.1 ppb
- Mercury (Hg) max. 0.1 ppb
- Molybdenum (Mo) max. 0.1 ppb
- Neodymium (Nd) max. 0.1 ppb
- Nickel (Ni) max. 0.5 ppb
- Niobium (Nb) max. 0.1 ppb
- Potassium (K) max. 1 ppb
- Praseodymium (Pr) max. 0.1 ppb
- Rhenium (Re) max. 0.1 ppb
- Rhodium (Rh) max. 0.1 ppb
- Rubidium (Rb) max. 0.1 ppb
- Ruthenium (Ru) max. 0.1 ppb
- Samarium (Sm) max. 0.1 ppb
- Scandium (Sc) max. 0.1 ppb
- Selenium (Se) max. 1 ppb
- Silver (Ag) max. 1 ppb
- Sodium (Na) max. 1 ppb
- Strontium (Sr) max. 0.1 ppb
- Tellurium (Te) max. 0.1 ppb
- Terbium (Tb) max. 0.1 ppb
- Thallium (Tl) max. 0.1 ppb
- Thorium (Th) max. 0.1 ppb
- Thulium (Tm) max. 0.1 ppb
- Tin (Sn) max. 0.5 ppb
- Titanium (Ti) max. 0.5 ppb
- Tungsten (W) max. 0.1 ppb
- Uranium (U) max. 0.1 ppb
- Vanadium (V) max. 0.5 ppb
- Ytterbium (Yb) max. 0.1 ppb
- Yttrium (Y) max. 0.1 ppb
- Zinc (Zn) max. 1 ppb
- Zirconium (Zr) max. 0.1 ppb

Quantity	Packaging Material	Art. no.
1 l	Plastic botttle	870.1011



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Volumetric solutions → page 177, 180, 191–192

HYDROCHLORIC ACID SUPERPURE (PPM GRADE) (MIN. 36,5 %)

- HCl
- Density 1.17 g/ml
- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P403+P233 P501



Specification

- Colour (APHA) max. 10
- Bromid (Br) max. 10 ppm
- free Chlorine (Cl_2) max. 0.5 ppm
- total Sulfur (S) max. 0.3 ppm
- Aluminium (Al) max. 0.005 ppm
- Antimony (Sb) max. 0.005 ppm
- Barium (Ba) max. 0.005 ppm
- Beryllium (Be) max. 0.002 ppm
- Bismuth (Bi) max. 0.002 ppm
- Boron (B) max. 0.002 ppm
- Cadmium (Cd) max. 0.005 ppm
- Calcium (Ca) max. 0.5 ppm
- Chromium (Cr) max. 0.001 ppm
- Cobalt (Co) max. 0.001 ppm
- Copper (Cu) max. 0.005 ppm
- Gallium (Ga) max. 0.002 ppm
- Gold (Au) max. 0.05 ppm
- Indium (In) max. 0.002 ppm
- Iron (Fe) max. 0.1 ppm
- Lead (Pb) max. 0.005 ppm
- Lithium (Li) max. 0.002 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.001 ppm
- Mercury (Hg) 0.1 ppm
- Molybdänium (Mo) max. 0.005 ppm
- Nickel (Ni) max. 0.001 ppm
- Silver (Ag) max. 0.002 ppm
- Sodium (Na) max. 0.5 ppm
- Strontium (Sr) max. 0.002 ppm
- Thallium (Tl) max. 0.005 ppm
- Tin(Sn) max. 0,.02 ppm
- Titanium (Ti) max. 0.005 ppm
- Zinc (Zn) max. 0.002 ppm
- Zirkonium (Zr) max. 0.005 ppm
- Platinium (Pt) max. 0.005 ppm
- Ammonium (NH_4) max. 1 ppm
- Phosphate max. 0.1 ppm
- Heavy metals (as Pb) max. 0.1 ppm
- Sulphate max. 0.5 ppm
- Sulphite max. 0.5 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Plastic botttle	868.2511

HYDROGEN PEROXIDE

- H_2O_2
- M = 34.01 g/mol
- CAS-No. 7722-84-1
- EC Index No. 008-003-00-9
- EC-No. 231-765-0
- Density (20 °C) 1.110 – 1.115 g/ml
- UN-No. 2014
- ADR 5.1 (8), II

GHS

- H272 H302+H312+H332 H314
- P280 P301+P312 P305+P351+P338 P405 P501



Specification

- Clear, colourless liquid
- Melting point -26 °C
- Boiling point 107 °C

HYDROGEN PEROXIDE PURISS., PH. EUR. (MIN. 25 % W/W (STAB.))

Specification

- Non-volatile substances max. 0.02 %
- Free acid max. 0.02 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Phosphate (PO_4) max. 0.05 %
- Arsenic (As) max. 0.0003 %
- Copper (Cu) max. 0.002 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.002 %

Quantity	Packaging Material	Art. no.
20 l	Plastic canister	410.9020

HYDROGEN PEROXIDE TECHNICAL (MIN. 30.0 %)

Specification

- Appearance of solution clear, colourless
- pH 2.0 – 4.0

Quantity	Packaging Material	Art. no.
30 kg	Plastic canister	445.9030

HYDROGEN PEROXIDE FOR SYNTHESIS (MIN. 30.0 % W/W (STAB.))

Specification

- Non-volatile substances max. 0.02 %
- Free acid max. 0.02 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Phosphate (PO_4) max. 0.05 %
- Arsenic (As) max. 0.0003 %
- Copper (Cu) max. 0.002 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.002 %
- Stabilized with phosphate

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	400.0511
1 l	Plastic bottle	400.1011
2.5 l	Plastic bottle	400.2511

HYDROGEN PEROXIDE PURISS., PH. EUR., PH. NORD. (MIN. 30.0 % W/W (STAB.))

Specification

- Identiy complies
- Non-volatile substances max. 0.02 %
- Acidic reacting substances complies
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Phosphate (PO_4) max. 0.05 %
- Arsenic (As) max. 0.0003 %
- Copper (Cu) max. 0.002 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.002 %
- Stabilized with phosphate

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	476.1011
2.5 l	Plastic bottle	476.2511

HYDROGEN PEROXIDE P. A., PH. NORD. (MIN. 30.0 % W/W (STAB.))

Specification

- Non-volatile substances max. 50 ppm
- Free acids (as H_2SO_4) max. 40 ppm
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.5 ppm
- Sulphate (SO_4) max. 1 ppm
- Nitrogen (N) max. 4 ppm
- Aluminium (Al) max. 0.5 ppm
- Arsenic (As) max. 0.01 ppm
- Barium (Ba) max. 0.05 ppm
- Beryllium (Be) max. 0.01 ppm
- Bismuth (Bi) max. 0.1 ppm
- Calcium (Ca) max. 0.2 ppm
- Cadmium (Cd) max. 0.01 ppm
- Cobalt (Co) max. 0.01 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.01 ppm
- Iron (Fe) max. 0.05 ppm
- Germanium (Ge) max. 0.05 ppm
- Potassium (K) max. 0.1 ppm
- Lithium (Li) max. 0.01 ppm
- Magnesium (Mg) max. 0.05 ppm
- Manganese (Mn) max. 0.01 ppm
- Molybdenum (Mo) max. 0.02 ppm
- Nickel (Ni) max.0.02 ppm
- Lead (Pb) max.0.01 ppm
- Strontium (Sr) max. 0.01 ppm
- Titanium (Ti) max. 0.1 ppm
- Thallium (Tl) max. 0.05 ppm
- Vanadium (V) max. 0.01 ppm
- Zinc (Zn) max. 0.05 ppm
- Zirconium (Zr) max. 0.1 ppm
- Residue on evaporation max. 0.005 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	437.1011

HYDROGEN PEROXIDE 30 % VLSI (30.0 – 32.0 % W/W)

Specification

- Colour (APHA) max. 5
- Total organic carbon (TOC) max. 20 ppm
- Chloride (Cl) max. 0.030 ppm
- Phosphate (PO_4) max. 0.100 ppm
- Sulphate (SO_4) max. 0.100 ppm
- Acidity max. 0.6 meq/g
- Silver (Ag) max. 1 ppb
- Aluminium (Al) max. 1 ppb
- Arsenic (As) max. 1 ppb
- Gold (Au) max. 1 ppb
- Boron (B) max. 1 ppb
- Barium (Ba) max. 1 ppb
- Beryllium (Be) max. 1 ppb
- Bismuth (Bi) max. 1 ppb
- Calcium (Ca) max. 1 ppb
- Cadmium (Cd) max. 1 ppb
- Cobalt (Co) max. 1 ppb
- Chromium (Cr) max. 1 ppb
- Copper (Cu) max. 1 ppb
- Iron (Fe) max. 1 ppb
- Gallium (Ga) max. 1 ppb
- Germanium (Ge) max. 1 ppb
- Potassium (K) max. 1 ppb
- Lithium (Li) max. 1 ppb
- Magnesium (Mg) max. 1 ppb
- Manganese (Mn) max. 1 ppb
- Molybdenum (Mo) max. 1 ppb
- Sodium (Na) max. 1 ppb
- Niobium (Nb) max. 1 ppb
- Nickel (Ni) max. 1 ppb
- Lead (Pb) max. 1 ppb
- Antimony (Sb) max. 1 ppb
- Strontium (Sr) max. 1 ppb
- Tantalum (Ta) max. 1 ppb
- Titanium (Ti) max. 1 ppb
- Thallium (Tl) max. 1 ppb
- Vanadium (V) max. 1 ppb
- Zinc (Zn) max. 1 ppb
- Zirconium (Zr) max. 1 ppb
- Particle count > 0.5 µm max. 150 P/ml
- Particle count > 1.0 µm max. 25 P/ml

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	452.2511

IMIDAZOLE

- $C_3H_4N_2$
- M = 68.08 g/mol
- CAS-No. 288-32-4
- EC Index No. 613-319-00-0
- EC-No. 206-019-2
- Density 1.03 g/ml
- UN-No. 3263
- ADR 8, III

GHS

- H302 H314 H361
- P201 P260 P281 P301+P312 P303+P361+P353 P305+P351+P338 P308+P313 P405 P501



Specification

- White to pale yellow crystals or flakes
- Boiling point 265 °C

IMIDAZOLE P. A., ACS (MIN. 99.0 %)

Specification

- Iron (Fe) max. 0.0005 %
- Water max. 0.2 %
- Sulphated ash max. 0.1 %
- Arsenic (As) max. 0.0002 %
- Copper (Cu) max. 0.001 %
- Lead (Pb) max. 0.0005 %
- pH (5 %, 25 °C) 9.5 – 11.0
- Residue on ignition max. 0.1 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9128.0500

IRON(III) CHLORIDE HEXAHYDRATE

- $FeCl_3$ x 6 H_2O
- M = 270.33 g/mol
- CAS-No. 10025-77-1
- EC-No. 231-729-4

GHS

- H302 H315 H318
- P280 P302+P352 P305+P351+P338 P308+P313 P501



Specification

- Brown solid
- Melting point 37 °C
- Boiling point 200 °C (decomposition)

IRON(III) CHLORIDE HEXAHYDRATE PURISS. (MIN. 99.0 %)

Specification

- Free acid max. 0.2 %
- Arsenic (As) max. 0.005 %
- Iron(II) (Fe(II)) max. 0.05 %
- Heavy metals (as Pb) max. 0.05 %
- Free chlorine (Cl_2) max. 0.005 %
- Sulphate (SO_4) max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2258.1000

IRON(III) CHLORIDE HEXAHYDRATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.01 %
- Free acid max. 0.2 %
- Arsenic (As) max. 0.0005 %
- Calcium (Ca) max. 0.01 %
- Copper (Cu) max. 0.002 %
- Iron(II) (Fe(II)) max. 0.002 %
- Lead (Pb) max. 0.002 %
- Magnesium (Mg) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- Zinc (Zn) max. 0.003 %
- Sodium (Na) max. 0.05 %
- Free chlorine (Cl_2) max. 0.001 %
- Phosphate (PO_4) max. 0.002 %
- Sulphate (SO_4) max. 0.005 %
- Nitrate (NO_3) max. 0.01 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	2254.0250
1 kg	Plastic bottle	2254.1000
25 kg	Fibre drum	2254.9025

Indicator solutions → see page 198–200

IRON(II) CHLORIDE TETRAHYDRATE

- $FeCl_2$ x 4 H_2O
- M = 198.81 g/mol
- CAS-No. 13478-10-9
- EC-No. 231-843-4
- Density 1.93 g/ml

GHS

- H302 H315 H318
- P280 P302+P352 P305+P351+P338 P501

Danger



Specification

- Green solid
- Melting point 110 °C

IRON(II) CHLORIDE TETRAHYDRATE P. A. (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0005 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.002 %
- Iron(III) (Fe(III)) max. 0.2 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Manganese (Mn) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.003 %
- Sulphate (SO_4) max. 0.01 %
- Nitrogen (N) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2241.1000

IRON(III) NITRATE NONAHYDRATE

- $Fe(NO_3)_3$ x 9 H_2O
- M = 404.00 g/mol
- CAS-No. 7782-61-8
- EC-No. 233-899-5
- Density 1.68 g/ml
- UN-No. 1466
- ADR 5.1, III

GHS

- H272 H315 H319
- P280 P302+P352 P305+P351+P338 P501

Danger



Specification

- Colourless to violet solid
- Melting point 43 °C (decomposition)

IRON(III) NITRATE NONAHYDRATE PURISS. (MIN. 97.0 %)

Specification

- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	2274.1000

IRON(III) NITRATE NONAHYDRATE P. A., ACS (MIN. 98.0 %)

Specification

- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.001 %
- Copper (Cu) max. 0.001 %
- Iron (Fe(II)) max. 0.002 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.001 %
- Manganese (Mn) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	2217.0250
1 kg	Plastic bottle	2217.1000

IRON(II) SULPHATE HEPTAHYDRATE

- $FeSO_4$ x 7 H_2O
- M = 278.02 g/mol
- CAS-No. 7782-63-0
- EC Index No. 026-003-01-4
- EC-No. 231-753-5
- Density 1.89 g/ml

GHS
- H302 H315 H319
- P280 P302+P352 P305+P351+P338 P501

Warning



Specification
- Green solid
- Melting point 64 °C

IRON(II) SULPHATE HEPTAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification
- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.001 %
- Potassium (K) max. 0.002 %
- Manganese (Mn) max. 0.05 %
- Sodium (Na) max. 0.002 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.002 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Nitrogen (N) max. 0.001 %
- Insoluble matter max. 0.01 %
- Substances not precipitated by ammonia max. 0.1 %
- Magnesium (Mg) max. 0.002 %
- Iron (Fe(III)) max. 0.1 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	2276.0100
1 kg	Plastic bottle	2276.1000
5 kg	Plastic bottle	2276.5000

ISOAMYL ALCOHOL

- $C_5H_{12}O$
- M = 88.148 g/mol
- CAS-No. 123-51-3
- EC Index No. 603-006-00-7
- EC-No. 204-633-5
- Density (20 °C) 0.805 – 0.813 g/ml
- UN-No. 1105
- ADR 3, III

GHS
- H226 H332 H335 EUH066
- P210 P241 P243 P303+P361+P353 P304+P340 P403+P235 P501

Warning



Specification
- Clear, colourless liquid
- Melting point -117 °C
- Boiling point 130.5 – 132.5 °C

ISOAMYL ALCOHOL P. A. (MIN. 97.0 %)

Specification
- Identity complies
- Refractive index (20 °C) 1.4023 – 1.4083
- Water (KF) max. 0.5 %
- Acidity max. 0.002 meq/g
- Acids and esters max. 0.2 %
- Carbonyl compounds (as HCHO) max. 0.1 %
- Residue on evaporation max. 30 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1831.1000

ISOBUTANOL

- $C_4H_{10}O$
- M = 74.12 g/mol
- CAS-No. 78-83-1
- EC Index No. 603-108-00-1
- EC-No. 201-148-0
- Density 0.801 – 0.803 g/ml
- UN-No. 1212
- ADR 3, III

GHS

- H226 H315 H318 H335 H336
- P210 P241 P264 P280 P303+P361+P353 P304+P340 P305+P351+P338 P403+P235 P501



Specification

- Clear liquid
- Melting point -107.8 °C
- Boiling point 105 – 109 °C

ISOBUTANOL P. A. (MIN. 99.0 %)

Specification

- Identity (IR) complies
- Colour (APHA) max. 10
- Fluorescence complies
- Solubility in water complies
- Refractive index (20 °C) 1.3945 – 1.3975
- Water (KF) max. 0.1 %
- Residue on evaporation max. 10 ppm
- Carbonyl compounds max. 100 ppm
- Acidity (as CH_3COOH) max. 100 ppm
- Alkalinity (as NH_3) max. 10 ppm
- Indole (C_8H_7N) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1870.1000

ISOHEXANE

- C_6H_{14} (Isomers)
- M = 86.18 g/mol
- CAS-No. 110-54-3
- EC Index No. 601-037-00-0
- EC-No. 203-777-6
- Density 0.655 – 0.665 g/ml
- UN-No. 1208
- ADR 3, II

GHS

- H225 H304 H315 H336 H411
- P210 P241 P264 P273 P303+P361+P353 P304+P340 P403+P235 P501



Specification

- Colourless liquid
- Melting point -94 °C
- Boiling point 67.0 – 69.0 °C

ISOHEXANE FOR TRACE ANALYSIS (MIN. 95.0 %)

Specification

- Identity (IR) complies
- Water (KF) max. 50 mg/kg
- Non-volatile residue max. 2 mg/kg
- Colour (Hazen) max. 5
- n-Hexane (C_6H_{14}) max. 5 %
- Total sulphur (S) max. 1 ppm
- GC-FID: Peak (Hydrocarbon oil index) (Retention range n-decane to n-tetracontane) max. 0.05 mg/l
- GC-FID: Peak (C10-C40) max. 5 µg/l
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1817.2500

ISOOCTANE

- C_8H_{18}
- M = 114.23 g/mol
- CAS-No. 540-84-1
- EC Index No. 601-009-00-8
- EC-No. 208-759-1
- Density 0.69 g/ml
- UN-No. 1262
- ADR 3, II

GHS

- H225 H304 H315 H336 H410
- P210 P240 P273 P301+P310 P331 P303+P361+P353 P304+P340 P403+P235 P501



Specification

- Colourless liquid
- Melting point -107 °C
- Boiling point 99 °C

ISOOCTANE FOR SYNTHESIS (MIN. 99.0 %)

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1813.1000
2.5 l	Glass bottle	1813.2500

ISOOCTANE P. A., ACS, PH. EUR. (MIN. 99.5 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.0005 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Sulphur (S) max. 0.005 %
- Residue on evaporation max. 0.001 %
- Acidity max. 0.0003 meq/g
- Colour (APHA) max. 10
- Density (20 °C) 0.691 – 0.696
- Refractive index (20 °C) 1.391 – 1.393
- Distillation range (98 – 100 °C) min. 95 %
- Transmittance (250 – 420 nm) min. 98 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1857.1000
2.5 l	Glass bottle	1857.2500

ISOOCTANE FOR HPLC (MIN. 99.5 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.3885 – 1.3945
- Water (KF) max. 50 ppm
- Residue on evaporation max. 2 ppm
- Acidity or alcalinity max. 0.0002 meq/g
- UV transmittance at 205 nm min. 10.0 %
- UV transmittance at 215 nm min. 60.0 %
- UV transmittance at 220 nm min. 80.0 %
- UV transmittance at 230 nm min. 90.0 %
- UV transmittance at 240 nm min. 95.0 %
- UV transmittance at 260 nm min. 99.0 %
- Aromatic compounds max. 5 ppm
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1807.2500

ISOOCTANE FOR RESIDUE ANALYSIS (MIN. 99.5 %)

Specification

- Identity complies
- Colour (Hazen) max. 10
- Water (KF) max. 50 ppm
- Non-volatile residue max. 2 ppm
- Free acids (as CH_3COOH) max. 20 ppm
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1802.2500
4 l	Glass bottle	1802.4000

ISOOCTANE ACC. TO ASTM D2699/D2700 (MIN. 99.75 %)

Specification

- Lead (Pb) max. 0.002 g/gal
- Heptane (C_7H_{16}) max. 0.01 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1878.2500

KJELDAHL TABLETS

KJELDAHL TABLETS ANTIFOAM S (SODIUM SULPHATE 0.97 G/SILICONE ANTIFOAM 0.03 G)

Specification

- Off-white, mottled flat tablets capable of being crumbled by hand
- Average weight range 0.98 – 1.03 g
- Weight uniformity max. 10 % outside 0.95 – 1.10 g, none outside 0.90 – 1.15 g
- Diameter 10 – 12 mm
- Friability max. 10 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1640.0500
1000 Tablets	Metal box	1640.1000

KJELDAHL TABLETS S (POTASSIUM SULPHATE 5.0 G/SELENIUM 5.0 MG)

Specification

- Pale grey, flat tablets
- Average weight range 4.85 – 5.15 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.75 – 5.25 g, none outside 4.65 – 5.35 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1641.0500
1000 Tablets	Metal box	1641.1000

KJELDAHL TABLETS W (WIENINGER METHOD) 5.0 G (SODIUM SULPHATE/COPPER(II) SULPHATE/SELENIUM 97.5 : 1.5 : 1)

Specification

- Dark grey tablets with green or blue specks
- Average weight range 4.85 – 5.15 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.75 – 5.25 g, none outside 4.65 – 5.35 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate x 5 H_2O ($CuSO_4$ x 5 H_2O) 62 – 82 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1642.0500
1000 Tablets	Metal box	1642.1000

KJELDAHL TABLETS C (POTASSIUM SULPHATE 5.0 G/COPPER(II) SULPHATE 0.1 G)

Specification

- Green or blue flat tablets
- Average weight range 4.95 – 5.25 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.85 – 5.35 g, none outside 4.70 – 5.50 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate x 5 H_2O ($CuSO_4$ x 5 H_2O) 90 – 110 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1643.0500
1000 Tablets	Metal box	1643.1000

Isopropanol → 2-Propanol see page 131–135

KJELDAHL TABLETS CX (POTASSIUM SULPHATE 5.0 G/COPPER(II) SULPHATE 0.5 G)

GHS
- H411
- P391 P501



Specification
- Green or blue speckled flat tablets
- Average weight range 5.35 – 5.65 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 5.20 – 5.80 g, none outside 5.10 – 5.90 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate x 5 H_2O ($CuSO_4$ x 5 H_2O) 450 – 550 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1644.0500
1000 Tablets	Plastic box	1644.1000

KJELDAHL TABLETS PS (POTASSIUM SULPHATE 5.0 G)

Specification
- Off-white, flat tablets
- Average weight range 4.85 – 5.15 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.75 – 5.25 g, none outside 4.65 – 5.35 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1645.0500
1000 Tablets	Metal box	1645.1000

KJELDAHL TABLETS NA (SODIUM SULPHATE 1.0 G)

Specification
- White, round, flat tablets
- Average weight range 950 – 1050 mg
- Diameter 10 – 12 mm
- Weight uniformity max. 10 % outside 925 – 1075 mg, none outside 900 – 1100 mg
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1649.0500
1000 Tablets	Plastic box	1649.1000

KJELDAHL TABLETS NAS (SODIUM SULPHATE 1.0 G/SELENIUM 0.05 G)

Specification
- Dark grey speckled, round, flat or FBE tablets
- Average weight range 1.008 – 1.092 g
- Weight uniformity max. 10 % outside 0.971 – 1.129 g, none outside 0.945 – 1.155 g
- Diameter 12 – 14 mm
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1650.0500
1000 Tablets	Plastic box	1650.1000

KJELDAHL TABLETS NAC (SODIUM SULPHATE 1.0 G/COPPER(II) SULPHATE 0.1 G)

- UN-No. 3077
- ADR 9, III

GHS

- H411
- P501



Specification

- Blue speckled tablets
- Average weight range 1.065 – 1.155 g
- Diameter 12 – 14 mm
- Weight uniformity max. 10 % outside 1.018 – 1.182 g, none outside 0.990 – 1.210 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate x 5 H_2O ($CuSO_4$ x 5 H_2O) 90 – 110 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1651.0500
1000 Tablets	Metal box	1651.1000

KJELDAHL TABLETS NACT (SODIUM SULPHATE 1.0 G/COPPER(II) SULPHATE 0.03 G/TITANIUM DIOXIDE 0.03 G)

- UN-No. 3077
- ADR 9, III

GHS

- H411
- P501



Specification

- White tablets with blue specks
- Average weight range 1.007 – 1.113 g
- Diameter 12.5 – 13.5 mm
- Weight uniformity max. 10 % outside 0.980 – 1.140 g, none outside 0.954 – 1.1656 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate ($CuSO_4$) 28 – 32 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1652.0500
1000 Tablets	Plastic box	1652.1000

KJELDAHL TABLETS KS 5.0 G (POTASSIUM SULPHATE/SELENIUM 100 : 1)

Specification

- Grey, round, flat tablets
- Average weight range 4.90 – 5.10 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.75 – 5.25 g, none outside 4.65 – 5.35 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1653.0500
1000 Tablets	Metal box	1653.1000

KJELDAHL TABLETS MISSOURI (POTASSIUM SULPHATE/COPPER SULPHATE)

- UN-No. 2588
- ADR 6.1, III

GHS

- H412
- P273 P501

Specification

- White tablets with green or blue specks
- Average weight range 4.75 – 5.25 g
- Diameter 18 – 20 mm
- Weight uniformity max. 10 % outside 4.625 – 5.375 g, none outside 4.50 – 5.50 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Chloride (Cl) max. 1.0 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1654.0500
1000 Tablets	Metal box	1654.1000

KJELDAHL TABLETS CL (POTASSIUM SULPHATE 5.0 G/COPPER(II) SULPHATE 0.15 G)

- UN-No. 3077
- ADR 9, III

GHS

- H411
- P501



Specification

- White to pale blue, round, flat tablets, with blue specks
- Average weight range 4.893 – 5.407 g
- Weight uniformity max. 10 % outside 4.764 – 5.530 g, none outside 4.635 – 5.665 g
- Diameter 18 – 20 mm
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1656.0500
1000 Tablets	Metal box	1656.1000

KJELDAHL TABLETS CM (POTASSIUM SULPHATE 3.5 G/COPPER(II) SULPHATE 0.1 G)

- UN-No. 3077
- ADR 9, III

GHS

- H411
- P501



Specification

- Blue speckled, round, flat tablets
- Average weight range 3.42 – 3.78 g
- Diameter 15 – 17 mm
- Weight uniformity max. 10 % outside 3.333 – 3.870 g, none outside 3.24 – 5.96 g
- Friability max. 5 %
- Nitrogen (N) max. 0.05 %
- Copper sulphate x 5 H_2O ($CuSO_4$ x 5 H_2O) 90 – 110 mg/tablet

Quantity	Packaging Material	Art. no.
500 Tablets	Plastic box	1658.0500
1000 Tablets	Metal box	1658.1000

LANTHANUM NITRATE HEXAHYDRATE

- $La(NO_3)_3$ x 6 H_2O
- M = 433.02 g/mol
- CAS-No. 10277-43-7
- EC-No. 233-238-0
- Density ~1.3 g/ml
- UN-No. 1477
- ADR 5.1, II

GHS

- H272 H315 H318 H335
- P220 P280 P304+P340 P305+P351+P338 P403+P235 P501



Specification

- White, crystalline powder
- Melting point 69.9 °C
- Boiling point ~126 °C

LANTHANUM NITRATE HEXAHYDRATE P. A. (MIN. 98.0 %)

Specification

- Identity complies
- Iron (Fe) max. 10 ppm

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1505.0100

LEAD(II) ACETATE TRIHYDRATE

- $Pb(CH_3COO)_2 \times 3\ H_2O$
- M = 379.33 g/mol
- CAS-No. 6080-56-4
- EC Index No. 082-005-00-8
- EC-No. 206-104-4
- UN-No. 1616
- ADR 6.1, III

GHS
- H360 H373 H410
- P273 P281 P308+P313 P314 P510



Specification
- Colourless to white solid
- Melting point 75 °C

LEAD(II) ACETATE TRIHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification
- Insoluble matter max. 0.005 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Nitrate (NO_3) max. 0.001 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1146.0250

LEAD(II) NITRATE

- $Pb(NO_3)_2$
- M = 331.21 g/mol
- CAS-No. 10099-74-8
- EC Index No. 082-001-00-6
- EC-No. 233-245-9
- Density 4.53 g/ml
- UN-No. 1469
- ADR 5.1 (6.1), II

GHS
- H302+H332 H360Df H373 H410
- P201 P260 P264 P270 P271 P273 P280 P301+P312 P330 P304+P340 P308+P313 P314 P391 P405 P501



Specification
- Colourless to white solid
- Melting point 470 °C (decomposition)

LEAD(II) NITRATE P. A., ACS, PH. EUR. (99 – 101 %)

Specification
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1159.0100

LITHIUM HYDROXIDE MONOHYDRATE

- $LiOH \times H_2O$
- M = 41.96 g/mol
- CAS-No. 1310-66-3
- EC-No. 215-183-4
- Density 1.51 g/ml
- UN-No. 2680
- ADR 8, II

GHS
- H301 H314
- P280 P301+P330+P331 P305+P351+P338 P308+P313 P501



Specification
- Colourless to white solid
- Melting point 462 °C
- Boiling point 964 °C

LITHIUM HYDROXIDE MONOHYDRATE P. A. (MIN. 98.0 %)

Specification
- Lithium carbonate (Li_2CO_3) max. 1 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.01 %
- Sodium (Na) max. 0.01 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1544.1000

MAGNESIUM ACETATE TETRAHYDRATE

- $Mg(CH_3COO)_2 \times 4\ H_2O$
- M = 214.46 g/mol
- CAS-No. 16674-78-5
- EC-No. 205-554-9
- Density 1.45 g/ml

Specification

- Colourless to white solid
- Melting point 80 °C

MAGNESIUM ACETATE TETRAHYDRATE P. A., ACS (MIN. 99.5 %)

Specification

- Barium (Ba) max. 0.001 %
- Calcium (Ca) max. 0.01 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Manganese (Mn) max. 0.001 %
- Sodium (Na) max. 0.001 %
- Strontium (Sr) max. 0.001 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0002 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1405.1000

MAGNESIUM CHLORIDE HEXAHYDRATE

- $MgCl_2 \times 6\ H_2O$
- M = 203.30 g/mol
- CAS-No. 7791-18-6
- EC-No. 232-094-6
- Density 1.57 g/ml

Specification

- Colourless solid
- Melting point 117 °C

MAGNESIUM CHLORIDE HEXAHYDRATE P. A., ACS, ISO (MIN. 99.0 %)

Specification

- Ammonium (NH_4) max. 0.001 %
- Barium (Ba) max. 0.002 %
- Calcium (Ca) max. 0.01 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Manganese (Mn) max. 0.0005 %
- Sodium (Na) max. 0.001 %
- Strontium (Sr) max. 0.002 %
- Zinc (Zn) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Nitrate (NO_3) max. 0.001 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- pH (5 % solution) 5.0 – 6.5
- Total nitrogen (N) max. 0.002 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1420.0250
1 kg	Plastic bottle	1420.1000
5 kg	Plastic bottle	1420.5000

MAGNESIUM SILICATE (FLORISIL®)

- MgO_3Si
- CAS-No. 1343-88-0
- EC-No. 215-681-1

MAGNESIUM SILICATE (FLORISIL®) FOR CHROMATOGRAPHY, 60-100 MESH

Specification

- White solid
- Particle size distribution < 150 µm max. 50 %
- Particle size distribution > 250 µm max. 10 %
- Water max. 5 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	2107.0500
10 kg	Plastic bucket	2107.9010
20 kg	Plastic bucket	2107.9020

Conductivity standard solutions → see page 220–221
Electrode filling solutions → see page 219

MAGNESIUM SULPHATE

- $MgSO_4$
- M = 120.37 g/mol
- CAS-No. 7487-88-9
- EC-No. 231-298-2
- Density 2.66 g/ml

Specification

- Colourless to white solid
- Melting point 1124 °C

MAGNESIUM SULPHATE ANHYDROUS PURISS. (MIN. 98.0 %)

Specification

- Loss on drying ±1 %
- Chloride (Cl) max. 0.001 %
- Nitrogen (N) max. 0.004 %
- Heavy metals (as Pb) max. 0.001 %
- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.04 %
- Iron (Fe) max. 0.001 %
- Manganese (Mn) max. 0.002 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1487.1000

MAGNESIUM SULPHATE HEPTAHYDRATE

- $MgSO_4 \times 7\ H_2O$
- M = 246.48 g/mol
- CAS-No. 10034-99-8
- EC-No. 231-298-2
- Density 1.68 g/ml

Specification

- Colourless powder

MAGNESIUM SULPHATE HEPTAHYDRATE P. A., ACS, PH. EUR. (MIN. 99.5 %)

Specification

- Ammonium (NH_4) max. 0.002 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0001 %
- Potassium (K) max. 0.001 %
- Manganese (Mn) max. 0.0005 %
- Sodium (Na) max. 0.001 %
- Zinc (Zn) max. 0.002 %
- Chloride (Cl) max. 0.0003 %
- Nitrate (NO_3) max. 0.002 %
- Nitrogen (N) max. 0.002 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- pH (5 %, 25 °C) 5.0 – 8.2
- Insoluble matter max. 0.005 %
- Strontium (Sr) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1423.1000
5 kg	Plastic bottle	1423.5000

MANGANESE(II) CHLORIDE TETRAHYDRATE

- $MnCl_2 \times 4\ H_2O$
- M = 197.91 g/mol
- CAS-No. 13446-34-9
- EC-No. 231-869-6
- Density 2.01 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H411
- P273 P301+P310 P501



Specification

- Pink solid
- Melting point 650 °C
- Boiling point 1190 °C (decomposition)

MANGANESE(II) CHLORIDE TETRAHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Calcium (Ca) max. 0.001 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Reducing substances max. 0.0005 %
- pH (5 %, 25 °C) 3.5 – 6.0
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1410.0100

MANGANESE(II) SULPHATE MONOHYDRATE

- $MnSO_4 \times H_2O$
- M = 169.02 g/mol
- CAS-No. 10034-96-5
- EC Index No. 025-003-00-4
- EC-No. 232-089-9
- Density 2,95 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H373 H411
- P273 P314 P501



Specification

- Pink solid
- Melting point 117 °C

MANGANESE(II) SULPHATE MONOHYDRATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Loss on ignition ±11 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.005 %
- Chloride (Cl) max. 0.001 %
- Reducing substances max. 0.0005 %
- Insoluble matter max. 0.01 %
- Cadmium (Cd) max. 0.002 %
- Chromium (Cr) max. 0.003 %
- Heavy metals (as Pb) max. 0.002 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1418.0250
1 kg	Plastic bottle	1418.1000

MERCURY(II) ACETATE

- $Hg(CH_3COO)_2$
- M = 318.68 g/mol
- CAS-No. 1600-27-7
- EC Index No. 080-004-00-7
- EC-No. 216-491-1
- Density 3.27 g/ml
- UN-No. 1629
- ADR 6.1, II

GHS

- H300+H310+H330 H373 H410
- P260 P264 P270 P271 P273 P301+P310 P330 P304+P340 P314 P320 P361+P364 P391 P403+P233 P405 P501



Specification

- Colourless solid
- Melting point 178 – 180 °C

MERCURY(II) ACETATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.01 %
- Iron (Fe) max. 0.001 %
- Mercury(I) (Hg) max. 0.3 %
- Heavy metals (as Pb) max. 0.002 %
- Chloride (Cl) max. 0.005 %
- Nitrate (NO_3) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Residue on ignition max. 0.02 %

Quantity	Packaging Material	Art. no.
50 g	Plastic bottle	1008.0050

MERCURY(II) SULPHATE

- $HgSO_4$
- M = 296.65 g/mol
- CAS-No. 7783-35-9
- EC Index No. 080-002-00-6
- EC-No. 231-992-5
- Density 6.47 g/ml
- UN-No. 1645
- ADR 6.1, II

GHS

- H290 H300+H310+H330 H314 H373 H410
- P234 P260 P264 P270 P271 P273 P280 P301+P310 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P314 P320 P403+P233 P501

Danger



Specification

- Colourless solid
- Melting point 400 °C (decomposition)

MERCURY(II) SULPHATE P. A., ACS (MIN. 99.0 %)

Specification

- Calcium (Ca) max. 0.003 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Mercury(I) (Hg(I)) max. 0.05 %
- Potassium (K) max. 0.002 %
- Magnesium (Mg) max. 0.003 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.003 %
- Nitrate (NO_3) max. 0.005 %
- Residue on ignition max. 0.02 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1048.0250

METHANOL

- CH_3OH
- M = 32.04 g/mol
- CAS-No. 67-56-1
- EC Index No. 603-001-00-X
- EC-No. 200-659-6
- Density (20 °C) 0.790 – 0.793 g/ml
- UN-No. 1230
- ADR 3 (6.1), II

GHS

- H225 H301+H311+H331 H370
- P210 P280 P301+P310 P303+P361+P353 P304+P340 P405 P501

Danger



Specification

- Colourless liquid
- Melting point -98 °C
- Boiling point 64.1 – 65.1 °C

METHANOL TECHNICAL GRADE (MIN. 99.0 %)

Specification

- Water max. 0.2 %
- Non-volatile substances max. 0.005 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	1411.5000

METHANOL FOR SYNTHESIS (MIN. 99.9 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3278 – 1.3298
- Residue on evaporation max. 50 ppm
- Acidity (as HCOOH) max. 20 ppm
- Alkality (as NH_3) max. 1 ppm
- $KMnO_4$ red. substances max. 3 ppm
- Water (KF) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1400.1000
2.5 l	Glass bottle	1400.2500
5 l	Plastic canister	1400.5011

METHANOL PURISS., PH. EUR., DAB (MIN. 99.7 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.1 %
- Free acid max. 0.003 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0002 %
- Chloride (Cl) max. 0.0001 %
- Sulphate (SO_4) max. 0.0005 %
- Acetone (CH_3COCH_3) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1462.1011
2.5 l	Plastic bottle	1462.2511
25 l	Plastic canister	1462.9025
200 l	Metal drum	1462.9200

METHANOL P. A., ACS, ISO, PH. EUR. (MIN. 99.8 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.05 %
- Free alkali max. 0.00005 %
- Free acid max. 0.002 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000001 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000001 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000002 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Chloride (Cl) max. 0.00005 %
- Sulphate (SO_4) max. 0.0001 %
- Acetaldehyde (C_2H_4O) max. 0.001 %
- Acetone (CH_3COCH_3) max. 0.001 %
- Ethanol (C_2H_5OH) max. 0.05 %
- Formaldehyde (HCHO) max. 0.001 %
- Reducing substances max. 0.00025 %
- Carbonyl compounds (as CO) max. 0.003 %
- Residue on evaporation max. 0.001 %
- Readily carbonisable substances complies
- Substances darkened by H_2SO_4 complies
- Solubility in water complies
- Colour (APHA) max. 10
- Alkalinity max. 0.0002 meq/g

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1437.1011
2.5 l	Plastic bottle	1437.2511
25 l	Plastic canister	1437.9025
50 l	Metal drum	1437.9050

METHANOL DRIED P. A. (MIN. 99.8 %)

Specification

- Non-volatile substances max. 0.001 % w/w
- Refractive index (20 °C) 1.328 – 1.330
- Water (KF) max. 0.005 % w/w
- Free alkali (as NH_3) max. 0.0001 %
- Free acids (as HCOOH) max. 0.002 %
- Aluminium (Al) max. 0.5 mg/kg
- Boron (B) max. 0.02 mg/kg
- Barium (Ba) max. 0.1 mg/kg
- Calcium (Ca) max. 0.5 mg/kg
- Cadmium (Cd) max. 0.05 mg/kg
- Cobalt (Co) max. 0.02 mg/kg
- Chromium (Cr) max. 0.02 mg/kg
- Copper (Cu) max. 0.01 mg/kg
- Iron (Fe) max. 0.1 mg/kg
- Magnesium (Mg) max. 0.1 mg/kg
- Manganese (Mn) max. 0.01 mg/kg
- Nickel (Ni) max. 0.02 mg/kg
- Lead (Pb) max. 0.02 mg/kg
- Tin (Sn) max. 0.1 mg/kg
- Zinc (Zn) max. 0.1 mg/kg
- Chloride (Cl) max. 0.5 mg/kg
- Sulphate (SO_4) max. 1 mg/kg
- Acetaldehyde (C_2H_4O) max. 10 mg/kg
- Acetone (CH_3COCH_3) max. 0.001 %
- Ethanol (C_2H_5OH) max. 0.1 % w/w
- Formaldehyde (HCHO) max. 100 mg/kg
- Substances reducing $KMnO_4$ (as O) max. 2.5 mg/kg
- Carbonyl compounds (as CO) max. 100 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1459.1000
2.5 l	Glass bottle	1459.2500

METHANOL GRADIENT GRADE FOR HPLC (MIN. 99.85 %)

Specification

- Refractive index (20 °C) 1.327 – 1.331
- Water (KF) max. 300 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as HCOOH) max. 10 mg/kg
- Free alkali (as NH_3) max. 1 mg/kg
- Carbonyl compounds (as CH_3COCH_3) max. 20 mg/kg
- HPLC gradient test complies
- HPLC gradient (peak) at 235 nm max. 2 mAU
- HPLC gradient (peak) at 254 nm max. 1 mAU
- UV transmittance at 210 nm min. 30 %
- UV transmittance at 220 nm min. 50 %
- UV transmittance at 235 nm min. 80 %
- UV transmittance at 260 nm min. 98 %
- Ethanol (C_2H_5OH) max. 200 mg/kg
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1481.1000
2.5 l	Glass bottle	1481.2500

METHANOL ULTRAGRADIENT GRADE FOR HPLC, REAG. PH. EUR. (MIN. 99.9 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3270 – 1.3300
- Density (20 °C) 0.7910 – 0.7930
- Distillation range 64.1 – 65.1 °C
- Acidty max. 0.0003 meq/g
- Alkalinity max. 0.00006 meq/g
- Water (KF) max. 0.02 %
- Residue on evaporation max. 5 ppm
- Ethanol (C_2H_5OH) max. 50 ppm
- $KMnO_4$ reducing compounds (as O) max. 2 ppm
- Fluorescence at 254 nm max. 1 ppb
- Fluorescence at 365 nm max. 1 ppb
- UV transmittance at 210 nm min. 30 %
- UV transmittance at 220 nm min. 55 %
- UV transmittance at 225 nm min. 65 %
- UV transmittance at 235 nm min. 85 %
- UV transmittance at 240 nm min. 90 %
- UV transmittance at 250 nm min. 95 %
- UV transmittance at 260 nm min. 98 %
- HPLC Gradient (peak) at 235 nm max. 2 mAU
- HPLC Gradient (peak) at 254 nm max. 1 mAU
- HPLC Gradient test complies
- Filtered through 0.2 µm
- Reag. Ph. Eur. R 1053200, R1 1053201, R2 1053202 conform

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1455.2500

METHANOL FOR RESIDUE ANALYSIS (MIN. 99.9 %)

Specification

- Refractive index (20 °C) 1.327 – 1.331
- Water (KF) max. 500 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as HCOOH) max. 10 mg/kg
- Free alkali (as NH_3) max. 1 mg/kg
- Colour (Hazen) max. 10
- GC-ECD: Peak (lindane) (Retention range trichlorobenzene to mirex) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1448.1000
2.5 l	Glass bottle	1448.2500

METHANOL FOR LC-MS (MIN. 99.95 %)

Specification

- Refractive index (20 °C) 1.327 – 1.331
- Water (KF) max. 200 mg/kg
- Non-volatile substances max. 2 mg/kg
- Free acid max. 0.0003 meq/g
- Free alkali max. 0.00006 meq/g
- UV transmittance at 210 nm min. 30 %
- UV transmittance at 225 nm min. 65 %
- UV transmittance at 235 nm min. 85 %
- UV transmittance at 250 nm min. 95 %
- UV transmittance at 260 nm min. 98 %
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Fluorescence (as quinine) at 365 nm max. 1 ppb
- HPLC gradient test complies
- HPLC gradient (peak) at 235 nm max. 2 mAU
- HPLC gradient (peak) at 254 nm max. 1 mAU
- Aluminium (Al) max. 0.000005 %
- Iron (Fe) max. 0.000005 %
- Sodium (Na) max. 0.000005 %
- Calcium (Ca) max. 0.000005 %
- Magnesium (Mg) max. 0.000005 %
- Potassium (K) max. 0.000005 %
- Sensitive impurities (reserpine) max. 100 ppb
- Colour (Hazen) max. 10
- Identity (IR) complies
- Filtered through 0.1 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1428.1000
2.5 l	Glass bottle	1428.2500

METHANOL FOR UHPLC-MS (MIN. 99.97 %)

Specification

- Assay (GC, on anhydrous basis) 99.97 – 100.0 %
- Water (KF) max. 0.03 % w/w
- Residue on evaporation max. 0.0001 % w/w
- LC-MS suitability test (reserpine) max. 30 ppb
- Absorption at 210 nm max. 0.40 AU
- Absorption at 220 nm max. 0.20 AU
- Absorption at 230 nm max. 0.10 AU
- Absorption at 254 nm max. 0.02 AU
- Fluorescence (as quinine) at 254 nm max. 0.5 ppb
- Fluorescence (as quinine) at 365 nm max. 0.5 ppb
- Gradient test at 220 nm max. 4 mAU
- Gradient test at 235 nm max. 2 mAU
- Acidity max. 0.0004 meq/g
- Alkalinity max. 0.0001 meq/g
- Aluminium (Al) max. 20 ppb
- Calcium (Ca) max. 50 ppb
- Iron (Fe) max. 20 ppb
- Potassium (K) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Sodium (Na) max. 100 ppb
- Lead (Pb) max. 20 ppb
- Filtered through 0.1 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1485.1000
2.5 l	Glass bottle	1485.2500

METHOXYETHANOL

- $C_3H_8O_2$
- M = 76.1 g/mol
- CAS-No. 109-86-4
- EC Index No. 603-011-00-4
- EC-No. 203-713-7
- Density (20 °C) 0.962 – 0.968 g/ml
- UN-No. 1188
- ADR 3, III

GHS

- H226 H302+H312+H332 H360FD
- P201 P210 P261 P280 P308+P313



Specification

- Clear, colourless liquid
- Boiling point 123.5 – 124.5 °C

METHOXYETHANOL P. A. (MIN. 99.5 %)

Specification

- Water miscibility complies
- Benzene miscibility complies
- Diethyl ether miscibility complies
- Refractive index (20 °C) 1.4004 – 1.4044
- Water (KF) max. 0.1 %
- Residue on evaporation max. 20 ppm
- Acidity (as CH_3COOH) max. 30 ppm
- Alkalinity (as NH_3) max. 0.85 ppm
- Carbonyl compounds (as CO) max. 25 ppm
- Heavy metals (as Pb) max. 2 ppm
- Peroxides (as H_2O_2) max. 10 ppm
- Aluminium (Al) max. 0.5 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 1 ppm
- Magnesium (Mg) max. 0.01 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.1 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm
- Identity (IR) complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1451.1000
2.5 l	Glass bottle	1451.2500









METHYLATED SPIRIT

- C_2H_5OH
- M = 46.07 g/mol
- CAS-No. 64-17-5
- EC Index No. 603-002-00-5
- EC-No. 200-578-6
- Density (20 °C) 0.804 – 0.807 g/ml
- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P240 P241 P260 P280 P303+P361+P353 P501



Specification

- Clear, colourless liquid
- Melting point -114.5 °C
- Boiling point >78 °C

METHYLATED SPIRIT (MIN. 96.1 %)

Specification

- Assay 96.1 – 96.9 %
- Methyl ethyl ketone 1.0 – 1.20 l/hl
- 2-Propanol (C_3H_7OH) 0.98-1.20 l/hl
- Bitrex® max. 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2259.1000
10 l	Plastic canister	2259.9010

2-METHYLBUTANE

- C_5H_{12}
- M = 72.15 g/mol
- CAS-No. 78-78-4
- EC Index No. 601-006-00-1
- EC-No. 201-142-8
- Density (20 °C) 0.610 – 0.630 g/ml
- UN-No. 1265
- ADR 3, I

GHS

- H224 H304 H336 H411 EUH066
- P210 P241 P273 P303+P361+P353 P304+P340 P403+P235 P501



Specification

- Clear, colourless liquid
- Boiling point 27 – 28.5 °C

2-METHYLBUTANE FOR SYNTHESIS (MIN. 95.0 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3507 – 1.3607
- Water (KF) max. 200 ppm
- Residue on evaporation max. 20 ppm
- Aromatic compounds max. 50 ppm
- Total sulphur (S) max. 2 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1715.1000
2.5 l	Glass bottle	1715.2500

2-METHYLBUTANE PURE (MIN. 95.0 %)

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3507 – 1.3607
- Water (KF) max. 200 ppm
- Residue on evaporation max. 20 ppm
- Aromatic compounds max. 50 ppm
- Total sulphur (S) max. 2 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1873.1000
2.5 l	Glass bottle	1873.2500

METHYLCYCLOHEXANE

- $CH_3CH(CH_2)_4CH_2$
- M = 98.19 g/mol
- CAS-No. 108-87-2
- EC Index No. 601-018-00-7
- EC-No. 203-624-3
- Density (20 °C) 0.77 g/ml
- UN-No. 2296
- ADR 3, II

GHS

- H225 H315 H336 H304 H411
- P210 P243 P261 P280 P303+P361+P353 P304+P340 P391 P403+P233 P501



Specification

- Clear liquid
- Melting point -126 °C
- Boiling point 100.9 °C

METHYLCYCLOHEXANE FOR SYNTHESIS (MIN. 99.0 %)

Specification

- Refractive index (20 °C) 1.419 – 1.427
- Benzene (C_6H_6) max. 200 ppm
- Total sulphur (S) max. 2 ppm
- Water (KF) max. 0.03 ppm
- Residue on evaporation max. 50 ppm
- Acidity or alkalinity complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1413.1000

METHYL ETHYL KETONE

- C_4H_8O
- M = 72.11 g/mol
- CAS-No. 78-93-3
- EC Index No. 606-002-00-3
- EC-No. 201-159-0
- Density (20 °C) 0.802 – 0.808 g/ml
- UN-No. 1193
- ADR 3, II

GHS

- H225 H319 H336 EUH066
- P210 P233 P241 P243 P261 P280 P303+P361+P353 P305+P351+P338 P312 P403+P235 P501



Specification

- Clear, colourless liquid
- Melting point -86 °C
- Boiling point 79 – 80 °C

METHYL ETHYL KETONE P. A. (MIN. 99.5 %)

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.3784 – 1.3834
- Water (KF) max. 500 mg/kg
- Residue on evaporation max. 10 ppm
- Acidity (as CH_3COOH) max. 30 ppm
- Aldehydes (as HCHO) max. 20 ppm
- Heavy metals (as Pb) max. 1 ppm
- Substances reducing $KMnO_4$ max. 2 ppm
- Aluminium (Al) max. 0.5 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.1 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm
- Colour (APHA) max. 10
- Alcohol miscibility complies
- Diethyl ether miscibility complies
- Solubility in water complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1443.1000
2.5 l	Glass bottle	1443.2500

METHYL ISOBUTYL KETONE

- $C_6H_{12}O$
- M = 100.16 g/mol
- CAS-No. 108-10-1
- EC Index No. 606-004-00-4
- EC-No. 203-550-1
- Density (20 °C) 0.797 – 0.805 g/ml
- UN-No. 1245
- ADR 3, II

GHS

- H225 H319 H332 H335 EUH066
- P210 P241 P261 P280 P303+P361+P353 P305+P351+P338 P312 P403+P235 P501

Danger



Specification

- Clear liquid
- Melting point -80.3 °C
- Boiling point 115.7 – 116.7 °C

METHYL ISOBUTYL KETONE P. A. (MIN. 99.5 %)

Specification

- Colour (APHA) max. 10
- Identity (IR) complies
- Alcohol miscibility complies
- Benzene miscibility complies
- Diethyl ether miscibility complies
- Refractive index (20 °C) 1.3930 – 1.3990
- Water (KF) max. 0.05 %
- Residue on evaporation max. 10 ppm
- Acidity max. 0.002 meq/g
- Alkalinity (as NH_3) max. 10 ppm
- Cadmium (Cd) max. 0.05 ppm
- Copper (Cu) max. 0.1 ppm
- Iron (Fe) max. 0.1 ppm
- Nickel (Ni) max. 0.1 ppm
- Lead (Pb) max. 0.1 ppm
- Zinc (Zn) max. 0.1 ppm
- Acetone (CH_3COCH_3) max. 0.1 %
- Mesityl- and isomesityl oxides max. 0.1 %
- 4-Methyl-2-pentanol ($C_6H_{13}O$) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1471.1000
2.5 l	Glass bottle	1471.2500

N-METHYL-2-PYRROLIDONE

- C_5H_9NO
- M = 99.13 g/mol
- CAS-No. 872-50-4
- EC Index No. 606-021-00-7
- EC-No. 212-828-1
- Density (20 °C) 1.026 – 1.032 g/ml

GHS

- H315 H319 H335 H360D
- P201 P261 P280 P308+P313 P403+P233 P501

Danger



Specification

- Clear, colourless liquid
- Melting point -24 °C
- Boiling point 202 – 205 °C

N-METHYL-2-PYRROLIDONE FOR SYNTHESIS (MIN. 99.5 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.4670 – 1.4710
- Colour (APHA) max. 50
- Water (KF) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1464.1000
2.5 l	Glass bottle	1464.2500

N-METHYL-2-PYRROLIDONE VLSI (MIN. 99.8 %)

Specification

- Assay (GC, dry substance) 99.8 – 100.0 %
- Colour (APHA) max. 15
- Residue on evaporation max. 0.0010 % w/w
- Water (KF) max. 0.03 % w/w
- Alkalinity (as CH_3NH_2) max. 0.004 %
- Chloride (Cl) max. 0.05 ppm
- Phosphate (PO_4) max. 1 ppm
- Dilution test complies
- Silver (Ag) max. 50 ppb
- Aluminium (Al) max. 80 ppb
- Arsenic (As) max. 50 ppb
- Gold (Au) max. 50 ppb
- Boron (B) max. 50 ppb
- Barium (Ba) max. 50 ppb
- Beryllium (Be) max. 50 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 50 ppb
- Cobalt (Co) max. 50 ppb
- Chromium (Cr) max. 50 ppb
- Copper (Cu) max. 50 ppb
- Iron (Fe) max. 50 ppb
- Gallium (Ga) max. 50 ppb
- Niobium (Nb) max. 50 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 50 ppb
- Magnesium (Mg) max. 50 ppb
- Manganese (Mn) max. 50 ppb
- Molybdenum (Mo) max. 50 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 50 ppb
- Lead (Pb) max. 50 ppb
- Antimony (Sb) max. 50 ppb
- Tin (Sn) max. 50 ppb
- Strontium (Sr) max. 50 ppb
- Titanium(Ti) max. 50 ppb
- Vanadium (V) max. 50 ppb
- Zinc (Zn) max. 50 ppb
- Particle count > 0.5 µm max. 80 P/ml
- Particle count > 1.0 µm max. 8 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1415.5000

2-METHYLTETRAHYDROFURAN

- $C_5H_{10}O$
- M = 86.14 g/mol
- CAS-No. 96-47-9
- EC-No. 202-507-4
- Density (20 °C) 0.855 g/ml
- UN-No. 2536
- ADR 3, II

GHS

- H225 H302 H315 H318 H335 EUH019
- P210 P241 P280 P303+P361+P353 P304+P340 P305+P351+P338 P403+P235 P501



Specification

- Colourless liquid
- Melting point -136 °C
- Boiling point 80.2 °C

2-METHYLTETRAHYDROFURAN FOR SYNTHESIS, PURE (MIN. 99.9 % (STAB.))

Specification

- Refractive index (20 °C) 1.404 – 1.408
- Water (KF) max. 300 mg/kg
- Peroxides (as H_2O_2) max. 100 mg/kg
- Stabilized with ionol 150 – 400 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1483.1000

2-METHYLTETRAHYDROFURAN FOR HPLC, ISOCRATIC (MIN. 99.5 % (UNSTAB.))

Specification

- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.404 – 1.408
- Water (KF) max. 200 mg/kg
- Non-volatile substances max. 5 mg/kg
- Peroxides (as H_2O_2) max. 300 mg/kg
- UV transmittance at 240 nm min. 30 %
- UV transmittance at 250 nm min. 50 %
- UV transmittance at 260 nm min. 70 %
- UV transmittance at 280 nm min. 90 %
- UV transmittance from 310 nm min. 98 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1474.1000
2.5 l	Glass bottle	1474.2500

More information about Green Solvents → see page 282

MIXTURE ACETONE/HYDROCHLORIC ACID

- Density 0.79 kg/l
- UN-No. 1090
- ADR 3 (8), II

GHS

- H225 H319 H336 EUH066
- P210 P261 P280 P312 P403+P233



MIXTURE ACETONE/HYDROCHLORIC ACID 4 % 95 : 5

Specification

- Water 4.5 – 5.5 %
- Acidity (as HCl) 0.18 – 0.22 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	2630.5000

MIXTURE ETHYL ACETATE/CYCLOHEXANE

- UN-No. 1993
- ADR 3, II

GHS

- H225 H304 H315 H319 H336 H410 EUH66
- P210 P261 P273 P280 P301+P310+P331 P312 P501



MIXTURE ETHYL ACETATE/CYCLOHEXANE 50 : 50 (% V/V) FOR RESIDUE ANALYSIS

Specification

- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- Ethyl acetate ($C_4H_8O_2$) 49.5 – 50.5 % v/v
- Cyclohexane (C_6H_{12}) 49.5 – 50.5 % v/v

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	697.2500

MIXTURE ETHYL ACETATE/ETHANOL

- UN-No. 1993
- ADR 3, II

GHS

- H225-H319-H336
- P210-P243-P261-P280-P303+P361+P353-P305+P351+P338-P308+P313-P403+P235-P501



MIXTURE ETHYL ACETATE/ETHANOL 3:1 FOR HPLC

- Density ~ 0.870 g/ml

Specification

- Clear, colourless liquid
- Ethylacetate ($C_4H_8O_2$) 74.0 – 76.0 %
- Ethanol (C_2H_5OH) 24.0 – 26.0 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1442.1000
2.5 l	Glass bottle	1442.2500

More information about Green Solvents → see page 282

MOLECULAR SIEVE

- $K_{12}[(AlO_2)_{12}(SiO_2)_{12}]$
- CAS-No. 1318-02-1
- EC-No. 215-283-8

Specification

- Beige Pearls

MOLECULAR SIEVE 3 Å (0.3 NM)

Specification

- Particle size 3 – 5 mm
- Water absorption capacity min. 210 ml/kg
- Actual pore size 0.3 nm (3Å)
- Bulk density 0.67 kg/l
- Pore volume 0.35 – 0.70 ml/g
- Breaking strenghth min. 70 N
- Specific surface 500 – 1000 m^2/g
- Abraison rate max. 0.25 %
- Loss on ignition (575 °C) max. 1.5 %
- Regeneration temperature 300 °C

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1433.0250
1 kg	Plastic bottle	1433.1000

MOLECULAR SIEVE 4 Å (0.4 NM)

Specification

- Particle size 3 – 5 mm
- Water absorption capacity min. 230 ml/kg
- Actual pore size 0.42 nm (4Å)
- Bulk density 0.67 kg/l
- Pore volume 0.35 – 0.70 ml/g
- Breaking strenghth min. 80 N
- Specific surface 500 – 1000 m^2/g
- Abraison rate max. 0.25 %
- Loss on ignition (575 °C) max. 1.5 %
- Regeneration temperature 300 °C

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1444.0250
1 kg	Plastic bottle	1444.1000

MOPS (3-MORPHOLINOPROPANESULFONIC ACID)

- $C_7H_{15}NO_4S$
- CAS-No. 1132-61-2
- EC-No. 214-478-5

GHS

- H315 H319 H335
- P261 P303+P361+P353 P305+P351+P338 P308+P311 P501

Warning



Specification

- Melting point ~280 °C

MOPS (3-MORPHOLINOPROPANESULFONIC ACID) (MIN. 99.5 %)

Specification

- Assay (titr.) min. 99.5 %
- pH (0.1 M H_2O) 3.5 – 4.5
- Identity (IR) complies
- Sodium (Na) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Absorption at 260 nm (1 cm, 0.1 M in H_2O) max. 0.05 AU
- Absorption at 280 nm (1 cm, 0.1 M in H_2O) max. 0.05 AU
- Water (KF) max. 0.5 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8773.0500

NICKEL(II) CHLORIDE HEXAHYDRATE

- $NiCl_2$ x 6 H_2O
- M = 237.70 g/mol
- CAS-No. 7791-20-0
- EC-No. 231-743-0
- Density 1.92 g/ml
- UN-No. 3288
- ADR 6.1, III

GHS

- H301+H331 H315 H317 H334 H341 H350 H360 H373 H410
- P201 P273 P302+P352 P304+P340 P308+P313 P403+P233 P501

Danger



Specification

- Green solid
- Melting point 140 °C
- Boiling point 1001 °C

NICKEL(II) CHLORIDE HEXAHYDRATE P. A. (MIN. 97.0 %)

Specification

- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.001 %
- Cobalt (Co) max. 0.002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Magnesium (Mg) max. 0.001 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1344.1000

NICKEL(II) SULPHATE HEXAHYDRATE

- $NiSO_4$ x 6 H_2O
- M = 262.86 g/mol
- CAS-No. 10101-97-0
- EC Index No. 028-009-00-5
- EC-No. 232-104-9
- Density 2.07 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302+H332 H315 H317 H334 H341 H350 H360 H372 H410
- P201 P260 P273 P280 P302+P352 P304+P340 P342+P311 P501

Danger



Specification

- Green solid
- Melting point 53 °C

NICKEL(II) SULPHATE HEXAHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Calcium (Ca) max. 0.005 %
- Cobalt (Co) max. 0.002 %
- Copper (Cu) max. 0.002 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Manganese (Mn) max. 0.0005 %
- Sodium (Na) max. 0.01 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.002 %
- Chloride (Cl) max. 0.001 %
- Nitrogen (N) max. 0.001 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1365.1000

NINHYDRIN

- $C_9H_6O_4$
- M = 178.14 g/mol
- CAS-No. 485-47-2
- EC-No. 207-618-1

GHS

- H302 H315 H319 H335
- P264 P271 P280 P304+P340 P305+P351+P338 P330 P501

Warning



Specification

- Yellow powder

NINHYDRIN P. A., ACS (MIN. 99.0 %)

Specification

- Appearance yellow powder
- Identity complies
- Melting point complies
- Aminoacid sensitivity complies
- Solubility complies

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1338.0025

NITRIC ACID

- HNO_3
- M = 63.01 g/mol
- CAS-No. 7697-37-2
- EC Index No. 007-004-00-1
- EC-No. 231-714-2
- Density 1.40 g/ml
- UN-No. 2031
- ADR 8 (5.1), I

GHS

- H272 H290 H314 H331 EUH071
- P210 P220 P260 P264 P301+P330+P331 P303+P361+P353 P304+P340 P310 P305+P351+P338 P403+PP233 P405 P501

Danger



Specification

- Colourless liquid
- Melting point -32 °C
- Boiling point 122 °C

NITRIC ACID PURISS. (MIN. 65.0 %)

Specification

- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.0005 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0001 %
- Sulphate (SO_4) max. 0.0002 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	827.1011
2.5 l	Plastic bottle	827.2511

NITRIC ACID P. A. (MIN. 65.0 %)

Specification

- Residue on ignition max. 0.0005 %
- Arsenic (As) max. 0.000001 %
- Calcium (Ca) max. 0.0001 %
- Cadmium (Cd) max. 0.000001 %
- Copper (Cu) max. 0.000005 %
- Iron (Fe) max. 0.00002 %
- Lead (Pb) max. 0.000005 %
- Zinc (Zn) max. 0.00001 %
- Chloride (Cl) max. 0.00005 %
- Phosphate (PO_4) max. 0.00005 %
- Sulphate (SO_4) max. 0.0001 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	865.1000
2.5 l	Glass bottle	865.2500
5 l	Plastic canister	865.5000
200 l	Metal drum	865.9200









Volumetric solutions → page 192

NITRIC ACID SUPERPURE FOR TRACE ANALYSIS (67.0 – 69.0 % W/W)

Specification

- Colour (APHA) max. 10
- Chloride (Cl) max. 0.2 ppm
- Total phosphorus (P) max. 0.01 ppm
- Total sulphur (S) max. 0.3 ppm
- Aluminium (Al) max. 1 ppb
- Antimony (Sb) max. 0.5 ppb
- Arsenic (As) max. 0.5 ppb
- Barium (Ba) max. 0.1 ppb
- Beryllium (Be) max. 0.1 ppb
- Bismuth (Bi) max. 0.1 ppb
- Boron (B) max. 1 ppb
- Cadmium (Cd) max. 0.5 ppb
- Calcium (Ca) max. 1 ppb
- Cerium (Ce) max. 0.1 ppb
- Caesium (Cs) max. 0.1 ppb
- Chromium (Cr) max. 1 ppb
- Cobalt (Co) max. 0.5 ppb
- Copper (Cu) max. 0.5 ppb
- Dysprosium (Dy) max. 0.1 ppb
- Erbium (Er) max. 0.1 ppb
- Europium (Eu) max. 0.1 ppb
- Gadolinium (Gd) max. 0.1 ppb
- Gallium (Ga) max. 0.1 ppb
- Germanium (Ge) max. 0.1 ppb
- Gold (Au) max. 0.1 ppb
- Hafnium (Hf) max. 0.1 ppb
- Holmium (Ho) max. 0.1 ppb
- Indium (In) max. 0.1 ppb
- Iron (Fe) max. 1 ppb
- Lanthanum (La) max. 0.1 ppb
- Lead (Pb) max. 0.1 ppb
- Lithium (Li) max. 0.1 ppb
- Magnesium (Mg) max. 1 ppb
- Manganese (Mn) max. 0.1 ppb
- Mercury (Hg) max. 0.1 ppb
- Molybdenum (Mo) max. 0.1 ppb
- Neodymium (Nd) max. 0.1 ppb
- Nickel (Ni) max. 0.5 ppb
- Niobium (Nb) max. 0.1 ppb
- Palladium (Pd) max. 0.5 ppb
- Platinum (Pt) max. 0.5 ppb
- Potassium (K) max. 1 ppb
- Praseodymium (Pr) max. 0.1 ppb
- Rhenium (Re) max. 0.1 ppb
- Rhodium (Rh) max. 0.5 ppb
- Rubidium (Rb) max. 0.1 ppb
- Ruthenium (Ru) max. 0.5 ppb
- Samarium (Sm) max. 0.1 ppb
- Scandium (Sc) max. 0.1 ppb
- Selenium (Se) max. 1 ppb
- Silver (Ag) max. 0.1 ppb
- Sodium (Na) max. 1 ppb
- Strontium (Sr) max. 0.1 ppb
- Tellurium (Te) max. 0.1 ppb
- Terbium (Tb) max. 0.1 ppb
- Thallium (Tl) max. 0.1 ppb
- Thorium (Th) max. 0.1 ppb
- Thulium (Tm) max. 0.1 ppb
- Tin (Sn) max. 0.5 ppb
- Titanium (Ti) max. 0.5 ppb
- Tungsten (W) max. 0.1 ppb
- Uranium (U) max. 0.1 ppb
- Vanadium (V) max. 0.5 ppb
- Ytterbium (Yb) max. 0.1 ppb
- Yttrium (Y) max. 0.1 ppb
- Zinc (Zn) max. 0.5 ppb
- Zirconium (Zr) max. 0.1 ppb

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	838.1011
2.5 l	Plastic bottle	838.2500

OCTANE-1-SULFONIC ACID SODIUM SALT

- $CH_3(CH_2)_7SO_3Na$
- CAS-No. 5324-84-5
- EC-No. 226-195-4
- M = 216.28 g/mol

Specification

- White, crystalline powder

OCTANE-1-SULFONIC ACID SODIUM SALT (MIN. 98.0 %)

Specification

- Identity complies
- Water (KF) max. 2.0 %
- Absorption at 200 nm (0.25 M) max. 0.10 AU
- Absorption at 210 nm (0.25 M) max. 0.05 AU
- Absorption at 220 nm (0.25 M) max. 0.04 AU
- Absorption at 230 nm (0.25 M) max. 0.03 AU
- Absorption at 240 nm (0.25 M) max. 0.01 AU
- Absorption at 250 nm (0.25 M) max. 0.01 AU
- Absorption at 260 nm (0.25 M) max. 0.01 AU

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1205.0025

1-OCTANOL

- $C_8H_{18}O$
- M = 130.23 g/mol
- CAS-No. 111-87-5
- EC-No. 203-917-6
- Density (20 °C) 0.83 g/ml

GHS
- H302 H315 H319 H412
- P273 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P391 P501

Warning



Specification
- Colourless liquid
- Melting point -56.5 °C
- Boiling point 126 °C

1-OCTANOL FOR SYNTHESIS (MIN. 99.0 %)

Quantity	Packaging Material	Art. no.
100 ml	Glass bottle	1220.0100
1 l	Glass bottle	1220.1000
2.5 l	Glass bottle	1220.2500

PALLADIUM MATRIX MODIFIER

- UN-No. 2031
- ADR 8,II

GHS
- H290 H314
- P260 P280 P301+P330+P331 P305+P351+P338 P308+P311 P501

Danger



PALLADIUM MATRIX MODIFIER 10000 µG PD/ML

- Density ~ 1.12 g/ml

Specification
- Clear yellowish liquid
- Purity min. 99.99 %
- Assay min. 10000 µg Pd/ml
- Assay 9800 µg/g (±0.2 %)

Quantity	Packaging Material	Art. no.
50 ml		1196.0050

PARAFFIN

- CAS-No. 8002-74-2
- EC-No. 232-315-6
- Density 0.764 g/ml

GHS
- EUH018

Specification
- White pastilles
- Melting point 50 – 52 °C
- Boiling point >100 °C

PARAFFIN FOR HISTOLOGY

Quantity	Packaging Material	Art. no.
2 kg	Paper bag	1168.2000

PARAFFIN OIL HIGH VISCOSITY

- CAS-No. 8042-47-5
- EC-No. 232-455-8

GHS
- H302+H332
- P261 P280 P301+P312 P501



Specification
- Coulorless, viscous liquid

PARAFFIN OIL HIGH VISCOSITY, PH. EUR., FOR HISTOLOGY

- Density 0.827 – 0.890 g/ml

Specification
- Viscosity (dynamic, 20 °C) 110-230 mPa*s
- Acidic or alkaline substances complies
- Aromatic, polycyclic hydrocarbons complies
- Conduct towards sulphuric acid complies
- Solid paraffins complies

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1160.1000
2.5 l	Plastic canister	1160.2500
180 kg	Tin drum	1160.9180

PARAFFIN OIL LOW VISCOSITY

- CAS-No. 8042-47-5
- EC-No. 232-455-8

GHS
- H302+H332
- P261-P280-P301+P312-P501



Specification
- Colourless liquid

PARAFFIN OIL LOW VISCOSITY, PH. EUR., FOR HISTOLOGY

Specification
- Refractive index (20 °C) approx. 1.46
- Acidic or alkaline substances complies
- Viscosity (dynamic, 20 °C) 25.00 – 80.00 mPa*s
- Relative density 0.8100 – 0.8750
- Polycyclic aromatic hydrocarbons (PAHs) complies
- Conduct towards sulphuric acid complies
- Solid paraffins complies

Quantity	Packaging Material	Art. no.
2.5 l	Plastic canister	1148.2500

N-PENTANE

- $CH_3(CH_2)_3CH_3$
- M = 72.15 g/mol
- CAS-No. 109-66-0
- EC Index No. 601-006-00-1
- EC-No. 203-692-4
- Density (20 °C) 0.621 – 0.631 g/ml
- UN-No. 1265
- ADR 3, II

GHS
- H225 H302 H336 H304 H411 EUH066
- P210 P241 P243 P261 P271 P273 P301+P310 P303+P361+P353 P304+P340 P312 P403+P233 P501



Specification
- Clear, colourless liquid
- Melting point -129.7 °C
- Boiling point 34.75 – 37.25 °C

N-PENTANE FOR SYNTHESIS (MIN. 99.0 %)

Specification
- Identity complies
- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3529 – 1.3629
- Residue on evaporation max. 20 ppm
- Water (KF) max. 150 ppm
- Aromatic compounds max. 10 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1100.1000
2.5 l	Glass bottle	1100.2500

N-PENTANE P. A. (MIN. 99.0 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.0005 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.0000002 %
- Copper (Cu) max. 0.0000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Sulphur (S) max. 0.005 %
- Isopentane (C_5H_{12}) max. 0.7 %
- Cyclopentane (C_5H_{10}) max. 0.3 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1147.1000
2.5 l	Glass bottle	1147.2500

N-PENTANE FOR TRACE ANALYSIS (MIN. 99.0 %)

Specification

- Assay (GC, on anhydrous basis) min. 99.0 %
- Acidity (as CH_3COOH) max. 0.002 %
- Colour (APHA) max. 5
- Fluorescence (as quinine) at 254 nm max. 1 ppb
- Fluorescence (as quinine) at 365 nm max. 1 ppb
- GC-FID: Peak (2-octanol) max. 10 ng/ml
- GC-ECD: Peak (epoxide) max. 10 pg/ml
- PAH test complies
- Residue on evaporation max. 0.0001 % w/w
- Water (KF) max. 0.005 % w/w
- GC-ECD: Peak (dioxine, furane, PCB's) max. 5 pg/ml
- GC-ECD: Peak (lindane) max. 2 pg/ml
- GC-NPD: Peak (parathione) max. 5 pg/ml
- Hydrocarbons between C_{10} and C_{40} max. 0.05 mg/l
- Transmission at 200 nm min. 50 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1149.2500

PENTANE-1-SULFONIC ACID SODIUM SALT

- $CH_3(CH_2)_4SO_3Na$
- M = 174.19 g/mol
- CAS-No. 22767-49-3
- EC-No. 245-208-4

Specification

- White, crystalline powder

PENTANE-1-SULFONIC ACID SODIUM SALT (MIN. 98.0 %)

Specification

- Water (KF) max. 2.0 %
- Absorption at 200 nm (0.25 M) max. 0.10 AU
- Absorption at 210 nm (0.25 M) max. 0.05 AU
- Absorption at 220 nm (0.25 M) max. 0.04 AU
- Absorption at 230 nm (0.25 M) max. 0.03 AU
- Absorption at 240 nm (0.25 M) max. 0.01 AU
- Absorption at 250 nm (0.25 M) max. 0.01 AU
- Absorption at 260 nm (0.25 M) max. 0.01 AU

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1105.0025

1-PENTANOL

- $C_5H_{12}O$
- M = 88.15 g/mol
- CAS-No. 71-41-0
- EC Index No. 603-200-00-1
- EC-No. 200-752-1
- Density (20 °C) 0.81 g/ml
- UN-No. 1105
- ADR 3, III

GHS

- H226 H332 H315 H335
- P302+P352 P210 P271 P280 P302+P353 P304+P340 P305+P351+P338 P403+P233 P501



Specification

- Colourless liquid
- Melting point -78 °C
- Boiling point 138 °C

1-PENTANOL FOR SYNTHESIS (MIN. 98.0 %)

Specification

- Water max. 0.3 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1177.1000
2.5 l	Glass bottle	1177.2500

PEPSIN LIQUID

- CAS-No. 9001-75-6
- EC Index No. 647-008-00-6
- EC-No. 232-629-3

GHS

- H315 H319 H334 H335
- P261 P285 P302+P352 P304+P341 P305+P351+P338 P403+P233P501



Specification

- Viscous, brownish liquid, hygroscopic

PEPSIN LIQUID

Specification

- Protein activity 600.0 – 800.0 U/ml
- pH (20 °C) 3.5 – 4.5

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	8483.5000

PERIODIC ACID

- H_5IO_6
- M = 227.94 g/mol
- CAS-No. 10450-60-9
- EC-No. 233-937-0
- Density 1.4 g/ml
- UN-No. 3084
- ADR 8 (5.1), II

GHS

- H272 H314
- P221 P264 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P501



Specification

- Colourless or white crystals
- Melting point 122 °C

PERIODIC ACID P. A. (MIN. 99.0 %)

Specification

- Identity complies
- Assay min. 99.0 %
- Iodide (I) max. 0.005 %
- Chloride (Cl) max. 0.02 %
- Water insolubles max. 0.02 %
- Residue on ignition (SO_4) max. 0.1 %

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1107.0025
100 g	Glass bottle	1107.0100

PETROLEUM BENZINE

- CAS-No. 64742-49-0
- EC Index No. 649-328-00-1
- EC-No. 265-151-9
- UN-No. 1268
- ADR 3, II

GHS

- H225 H304 H336 H411 EUH066
- P210 P241 P243 P261 P271 P273 P280 P301+P310 P303+P361+P353 P304+P340 P403+P233 P501



Specification

- Colourless liquid

PETROLEUM BENZINE PURISS., PH. EUR. (BOILING RANGE 40 – 60 °C)

- Density 0.653 g/ml

Specification

- Melting point -100 °C
- Boiling point 40 – 60 °C
- Appereance of solution complies
- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Benzene (C_6H_6) max. 0.001 %
- Sulphur (S) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1176.1000
5 l	Aluminium can	1176.5000
25 l	Metal drum	1176.9025

PETROLEUM BENZINE P. A., ISO, ACS (BOILING RANGE 40 – 60 °C)

- Density (20 °C) 0.640 – 0.655 g/ml

Specification

- Melting point max. -100 °C
- Boiling point 40 – 60 °C
- Non-volatile substances max. 0.001 %
- Water max. 0.01 %
- Free acid max. 0.002 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.000002 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Benzene (C_6H_6) max. 0.01 %
- Iodine number max. 0.3
- Sulphur (S) max. 0.005 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.001 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1194.1000
2.5 l	Glass bottle	1194.2500
5 l	Aluminium can	1194.5000
25 l	Metal drum	1194.9025

PETROLEUM BENZINE FOR RESIDUE ANALYSIS (BOILING RANGE 35 – 60 °C)

Specification

- Boiling point 35 – 60 °C
- Refractive index (20 °C) 1.355 – 1.359
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 2 mg/kg
- Total sulphur (S) max. 10 ppm
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- Colour (Hazen) max. 10

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1152.2500

PETROLEUM BENZINE FOR PESTICIDE ANALYSIS (BOILING RANGE 40 – 65 °C)

Specification

- Boiling point 40 – 65 °C
- Water (KF) max. 100 mg/kg
- Non-volatile substances max. 2 mg/kg
- Colour (Hazen) max. 10
- Density (d15/4) 0.640 – 0.655
- GC chromatogramm complies
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl_4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	1145.2500

PETROLEUM BENZINE P. A. (BOILING RANGE 60 – 80 °C)

- Density (20 °C) 0.660 – 0.690 g/ml

Specification

- Boiling point 60 – 80 °C
- Colour (APHA) max. 10
- Identity complies
- Water (KF) max. 100 ppm
- Residue on evaporation max. 10 ppm
- Acidity (as CH_3COOH) max. 5 ppm
- Substances reducing $KMnO_4$ max. 20 ppm
- Total sulphur (S) max. 50 ppm
- Ready carbonizable substances complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1185.1000
2.5 l	Glass bottle	1185.2500

PETROLEUM BENZINE (BOILING RANGE 80 – 110 °C)

- Density (20 °C) 0.689 – 0.735 g/ml

Specification

- Boiling point 80 – 110 °C
- Density (15 °C) 0.693 – 0.739 g/ml
- Refractive index (20 °C) 1.3890 – 1.4061
- Colour (Saybolt) max. 50

Quantity	Packaging Material	Art. no.
2.5 l	Plastic cansiter	1186.2500

PHENOL

- C_6H_5OH
- M = 94.11 g/mol
- CAS-No. 108-95-2
- EC Index No. 604-001-00-2
- EC-No. 203-632-7
- Density 1.06 g/ml
- UN-No. 1671
- ADR 6.1, II

GHS

- H301+H311+H331 H314 H341 H373
- P201 P260 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P361+P364 P403+P233 P501



Specification

- Colourless powder
- Melting point 40 °C
- Boiling point 182 °C

PHENOL P. A., ACS, PH. EUR. (MIN. 99.5 %)

Specification

- Appereance of solution complies
- Chloride (Cl) max. 0.0005 %
- Iron (Fe) max. 0.0001 %
- o-Cresol (C_7H_8O) max. 0.05 %
- m-Cresol (C_7H_8O) max. 0.05 %
- p-Cresol (C_7H_8O) max. 0.05 %
- Non-volatile substances max. 0.01 %
- Water max. 0.2 %
- Residue on evaporation max. 0.05 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1109.1000

pH Buffer solutions and pH Indicator paper → see page 210–218

ORTHO-PHOSPHORIC ACID

- H_3PO_4
- M = 98.00 g/mol
- CAS-No. 7664-38-2
- EC Index No. 015-011-00-6
- EC-No. 231-633-2
- UN-No. 1805
- ADR 8, III

GHS

- H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P310 P305+P351+P338 P321 P363 P405 P501

Danger

Specification

- Colourless liquid
- Melting point ~21 °C
- Boiling point ~158 °C

ORTHO-PHOSPHORIC ACID PURISS. (MIN. 60.0 %)

- Density 1.426 g/ml

Specification

- Assay (titr.) min. 60.0 %

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	DG10185.5000

ORTHO-PHOSPHORIC ACID PURISS., DAB, PH. EUR., BP, PH. FRANÇ., NF, FCC (MIN. 85.0 %)

- Density 1.71 g/ml

Specification

- Chloride (Cl) max. 0.0005 %
- Fluoride (F) max. 0.0005 %
- Nitrate (NO_3) max. 0.0005 %
- Phosphonic acid (H_3PO_3) max. 0.003 %
- Sulphate (SO_4) max. 0.005%
- Arsenic (As) max. 0.0002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1198.2511

ORTHO-PHOSPHORIC ACID P. A., PH. EUR., BP (MIN. 84.0 % W/W)

- Density 1.68 g/ml

Specification

- Assay 84.0 – 90.0 % w/w
- Identity complies
- Appearance of the solution complies
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.01 %
- Hypophosphorous (H_3PO_2) and phosphonic acid (H_3PO_3) complies
- Heavy metals (as Pb) max. 0.001 %
- Substances precipitaded by ammonia complies
- Arsenic (As) max. 0.0002 %
- Iron (Fe) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1156.1000
2.5 l	Glass bottle	1156.2500









POLYETHYLENE GLYCOL 400

- $HO(C_2H_4O)_nH$
- M = 380 – 440 g/mol
- CAS-No. 25322-68-3
- Density 1.13 g/ml

Specification

- Clear liquid
- Melting point 0 – 10 °C
- Boiling point 244 °C

POLYETHYLENE GLYCOL 400

Specification

- Colour (Hazen) max. 30
- Water max. 0.5 %
- Hydroxyl value 267 – 295 mg KOH/g
- pH (5 %, H_2O) 5 – 7

Quantity	Packaging Material	Art. no.
205 kg	Metal drum	1754.9205

POTASSIUM ACETATE

- KCH_3COO
- M = 98.14 g/mol
- CAS-No. 127-08-2
- EC-No. 204-822-2
- Density 1.57 g/ml

Specification

- Colourless to white solid
- Melting point 292 °C

POTASSIUM ACETATE PURISS., PH. EUR., BP (MIN. 99.0 %)

Specification

- Iron (Fe) max. 0.001 %
- Mercury (Hg) max. 0.0001 %
- Sodium (Na) max. 0.5 %
- Lead (Pb) max. 0.0004 %
- Acetic acid (CH_3COOH) max. 0.5 %
- Chloride (Cl) max. 0.01 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.0004 %
- Aluminium (Al) max. 0.0001 %
- Arsenic (As) max. 0.0002 %
- Water max. 3 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1613.1000

POTASSIUM BROMATE

- $KBrO_3$
- M = 167.01 g/mol
- CAS-No. 7758-01-2
- EC Index No. 035-003-00-6
- EC-No. 231-829-8
- Density 3.25 g/ml
- UN-No. 1484
- ADR 5.1, II

GHS

- H271 H301 H350
- P201 P309 P310 P501



Specification

- Colourless to white solid
- Melting point 350 °C

POTASSIUM BROMATE P. A., ACS, PH. EUR., ISO (MIN. 99.8 %)

Specification

- Free acid max. 0.005 %
- Free alkali max. 0.003 %
- Iron (Fe) max. 0.0005 %
- Sodium (Na) max. 0.01 %
- Heavy metals (as Pb) max. 0.0005 %
- Bromide (Br) max. 0.05 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- pH (5 %, 25 °C) 5 – 9
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1669.0100

POTASSIUM CHLORIDE

- KCl
- M = 74.55 g/mol
- CAS-No. 7447-40-7
- EC-No. 231-211-8
- Density 1.98 g/ml

Specification

- White powder
- Melting point 773 °C
- Boiling point 1413 °C

POTASSIUM CHLORIDE P. A., ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Barium (Ba) max. 0.001 %
- Calcium (Ca) max. 0.001 %
- Iron (Fe) max. 0.0002 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %
- Bromide (Br) max. 0.01 %
- Iodide (I) max. 0.002 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.001 %
- Nitrogen (N) max. 0.001 %
- Loss on drying max. 0.2 %
- pH (5 % solution) 5.0 – 8.0

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1632.0500
1 kg	Plastic bottle	1632.1000
5 kg	Plastic bottle	1632.5000

POTASSIUM DIHYDROGEN PHOSPHATE

- KH_2PO_4
- M = 136.09 g/mol
- CAS-No. 7778-77-0
- EC-No. 231-913-4
- Density 2.34 g/ml

Specification

- White powder
- Melting point ~253 °C (decomposition)

POTASSIUM DIHYDROGEN PHOSPHATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Loss on drying (110 °C) max. 0.1 %
- Arsenic (As) max. 0.00005 %
- Iron (Fe) max. 0.001 %
- Sodium (Na) max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Sulphate (SO_4) max. 0.003 %
- Nitrogen (N) max. 0.001 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0003 %
- Chromium (Cr) max. 0.0002 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.001 %
- pH (5 %, 25 °C) 4.2 – 4.5
- Insoluble matter max. 0.01 %
- Residual solvents (Ph. Eur./ICH) not existent
- Identity complies
- Appearance of solution complies
- Reducing substances complies

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1648.0250
1 kg	Plastic bottle	1648.1000
5 kg	Plastic bottle	1648.5000

Electrode filling and storage solutions → page 219–220

POTASSIUM DISULPHATE

- $K_2S_2O_7$
- M = 254.32 g/mol
- CAS-No. 7790-62-7
- EC-No. 232-216-8
- Density 2.28 g/ml
- UN-No. 3260
- ADR 8, II

GHS
- H314
- P280 P305+P351+P358 P501

Danger



Specification
- Colourless to white solid
- Melting point 325 °C

POTASSIUM DISULPHATE P. A. (MIN. 97.5 %)

Specification
- Assay min. 97.5 %
- Aluminium (Al) max. 0.001 %
- Calcium (Ca) max. 0.003 %
- Iron (Fe) max. 0.0005 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.01 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.001 %
- Nitrogen (N) max. 0.002 %
- Acidity (as H_2SO_4) 37.5 – 38.6 %
- Water max. 2.5 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1699.1000

POTASSIUM FLUORIDE

- KF
- M = 58.10 g/mol
- CAS-No. 7789-23-3
- EC Index No. 009-005-00-2
- EC-No. 232-151-5
- Density 2.48 g/ml
- UN-No. 1812
- ADR 6.1, III

GHS
- H301+H311+H331
- P280 P301+P310 P302+P352 P304+P340 P308+P311 P501

Danger



POTASSIUM FLUORIDE P. A. (MIN. 99.0 %)

Specification
- Free acid max. 0.01 %
- Free alkali max. 0.01 %
- Cadmium (Cd) max. 0.0005 %
- Cobalt (Co) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Potassium hexafluorosilicate ($K_2[SiF_6]$) max. 0.1 %
- Sulphate (SO_4) max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1630.1000
20 kg	Fibre drum	1630.9020

POTASSIUM HEXACYANOFERRATE(III)

- $K_3[Fe(CN)_6]$
- M = 329.25 g/mol
- CAS-No. 13746-66-2
- EC-No. 237-323-3
- Density 1.85 g/ml
- Melting point 300 °C (decomposition)

POTASSIUM HEXACYANOFERRATE(III) P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification
- Calcium (Ca) max. 0.0005 %
- Cadmium (Cd) max. 0.0005 %
- Cobalt (Co) max. 0.005 %
- Copper (Cu) max. 0.001 %
- Sodium (Na) max. 0.02 %
- Nickel (Ni) max. 0.001 %
- Lead (Pb) max. 0.002 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.005 %
- Potassium hexacyanoferrate(II) ($K_4[Fe(CN)_6]$) max. 0.02 %
- Sulphate (SO_4) max. 0.005 %
- Insoluble matter in water max. 0.005 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1610.0250
1 kg	Plastic bottle	1610.1000

POTASSIUM HEXACYANOFERRATE(II) TRIHYDRATE

- $K_4[Fe(CN)_6] \times 3\ H_2O$
- M = 422.39 g/mol
- CAS-No. 14459-95-1
- EC-No. 237-722-2
- Density 1.85 g/ml
- Melting point 70 °C (decomposition)

POTASSIUM HEXACYANOFERRATE(II) TRIHYDRATE P. A., ISO (MIN. 99.0 %)

Specification

- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.002 %
- Sodium (Na) max. 0.01 %
- Carbonate (CO_3) max. 0.002 %
- Lead (Pb) max. 0.002 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Insoluble matter in water max. 0.005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1609.0100
500 g	Plastic bottle	1609.0500

POTASSIUM HYDROGEN CARBONATE

- $KHCO_3$
- M = 100.12 g/mol
- CAS-No. 298-14-6
- EC-No. 206-059-0
- Density 2.17 g/ml

Specification

- Colourless to white solid
- Melting point 292 °C

POTASSIUM HYDROGEN CARBONATE P. A., PH. EUR. (MIN. 99.5 %)

Specification

- Aluminium (Al) max. 0.0005 %
- Calcium (Ca) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Sodium (Na) max. 0.02 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Silicate (SiO_2) max. 0.001 %
- Sulphate (SO_4) max. 0.001 %
- Nitrogen (N) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1622.0500

DI-POTASSIUM HYDROGEN PHOSPHATE

- K_2HPO_4
- M = 174.18 g/mol
- CAS-No. 7758-11-4
- EC-No. 231-834-5
- Density 2.44 g/ml

Specification

- Colourless solid

DI-POTASSIUM HYDROGEN PHOSPHATE ANHYDROUS P. A., PH. EUR. (MIN. 99.0 %)

Specification

- Loss on drying max. 1.0 %
- Nitrogen (N) max. 0.001 %
- Sodium (Na) max. 0.5 %
- Chloride (Cl) max. 0.003 %
- Sulphate (SO_4) max. 0.005 %
- Iron (Fe) max. 0.001 %
- Calcium (Ca) max. 0.003 %
- Magnesium (Mg) max. 0.003 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- Arsenic (As) max. 0.0001 %
- Reducing substances complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1634.1000
5 kg	Plastic bottle	1634.5000

DI-POTASSIUM HYDROGEN PHOSPHATE TRIHYDRATE

- K_2HPO_4 x 3 H_2O
- M = 228.23 g/mol
- CAS-No. 16788-57-1
- EC-No. 231-834-5

Specification

- Colourless to white solid (hygroscopic)

DI-POTASSIUM HYDROGEN PHOSPHATE TRIHYDRATE P. A., PH. EUR. (MIN. 99.0 %)

Specification

- pH 9.1 – 9.3
- Chloride (Cl) max. 0.001 %
- Sulfate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Arsenic (As) max. 0.00005 %
- Iron (Fe) max. 0.0005 %
- Nitrogen (N) max. 0.001 %
- Sodium (Na) max. 0.1 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1661.1000

POTASSIUM HYDROGEN PHTHALATE

- $KC_8H_5O_4$
- M = 204.22 g/mol
- CAS-No. 877-24-7
- EC-No. 212-889-4
- Density 1.636 g/ml

Specification

- Colourless solid
- Melting point 295 °C

POTASSIUM HYDROGEN PHTHALATE P. A., PH. EUR., ISO, BUFFER SUBSTANCE (MIN. 99.8 %)

Specification

- Loss on drying (105 °C) max. 0.05 %
- Cadmium (Cd) max. 0.0005 %
- Cobalt (Co) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Sodium (Na) max. 0.01 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1627.0100
1 kg	Plastic bottle	1627.1000

POTASSIUM HYDROGEN SULPHATE

- $KHSO_4$
- M = 136.17 g/mol
- CAS-No. 7646-93-7
- EC Index No. 016-056-00-4
- EC-No. 231-594-1
- Density 2.24 g/ml
- UN-No. 2509
- ADR 8, II

GHS

- H314 H335
- P280 P301+P330+P331 P305+P351+P338 P309 P310 P501



Specification

- Colourless solid
- Melting point 195 °C

POTASSIUM HYDROGEN SULPHATE PURISS. (98.0 – 102.0 %)

Specification

- Ammonium (NH_4) max. 0.002 %
- Calcium (Ca) max. 0.02 %
- Iron (Fe) max. 0.002 %
- Heavy metals (as Pb) max. 0.002 %
- Chloride (Cl) max. 0.002 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1673.1000

POTASSIUM HYDROGEN SULPHATE P. A., PH. EUR. (MIN. 99.0 %)

Specification

- Aluminium (Al) max. 0.002 %
- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.002 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Magnesium (Mg) max. 0.0005 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Nitrogen (N) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1660.0500

POTASSIUM HYDROXIDE

- KOH
- M = 56.11 g/mol
- CAS-No. 1310-58-3
- EC Index No. 019-002-00-8
- EC-No. 215-181-3
- Density 2.04 g/ml
- UN-No. 1813
- ADR 8, II

GHS

- H290 H302 H314
- P280 P301+P312 P303+P361+P353 P304+P340 P305+P351+P338 P403 P501



Specification

- Colourless pellets
- Melting point 360 °C
- Boiling point 1320 °C

POTASSIUM HYDROXIDE PELLETS PURISS., DAB, PH. EUR., BP, NF (MIN. 85.0 %)

Specification

- Potassium carbonate (K_2CO_3) max. 1.0 %
- Aluminium (Al) max. 0.001 %
- Arsenic (As) max. 0.0003 %
- Calcium (Ca) max. 0.002 %
- Iron (Fe) max. 0.001 %
- Sodium (Na) max. 1.0 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.002 %
- Silicate (SiO_2) max. 0.01 %
- Nitrogen (N) max. 0.0005 %
- pH (56 g/l) 14
- Appearance complies
- Solubility complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1655.1000
5 kg	Plastic canister	1655.5000

POTASSIUM HYDROXIDE PELLETS P. A., PH. EUR., ISO (MIN. 85.0 %)

Specification

- Potassium carbonate (K_2CO_3) max. 1.0 %
- Aluminium (Al) max. 0.001 %
- Calcium (Ca) max. 0.001 %
- Magnesium (Mg) max. 0.001 %
- Sodium (Na) max. 0.5 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Silicate (SiO_2) max. 0.005 %
- Sulphate (SO_4) max. 0.0005 %
- Nitrogen (N) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Appearance of solultion clear, colourless

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1681.1000
5 kg	Plastic canister	1681.5000

Volumetric solutions → page 182, 193

POTASSIUM HYDROXIDE SOLUTION

Specification
- Colourless liquid

POTASSIUM HYDROXIDE SOLUTION 30 % (29 – 31 %)

- KOH
- Density 1.281 g/ml
- UN-No. 1814
- ADR 8, III

GHS
- H302 H314
- P280 P301+P312 P303+P361+P353 P305+P351+P338 P501



Specification
- Colourless liquid

Quantity	Packaging Material	Art. no.
10 l	Plastic canister	1694.9010

POTASSIUM HYDROXIDE SOLUTION 50 % (V/V) Z. A. (MIN. 50.0 %)

- KOH
- UN-No. 1814
- ADR 8, III

GHS
- H290 H302 H314
- P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P312 P390 P501



Specification
- For nitrate determination.

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	1614.5000

POTASSIUM IODATE

- KIO_3
- M = 214.00 g/mol
- CAS-No. 7758-05-6
- EC-No. 231-831-9
- Density 3.98 g/ml
- UN-No. 1479
- ADR 5.1, II

GHS
- H272 H302 H319
- P210 P220 P280 P301+P330+P331 P305+P351+P338 P308+P311



Specification
- Colourless to white solid
- Melting point 560 °C (decomposition)

POTASSIUM IODATE PURISS., FCC (99.0 – 100.0 %)

Specification
- Loss on drying max. 0.5 %
- Arsenic (As) max. 0.0002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Iodide (I) max. 0.002 %
- Sulphate (SO_4) max. 0.05 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1672.0500

POTASSIUM IODATE P. A., ACS, ISO, PH. EUR. (MIN. 99.7 %)

Specification

- Loss on drying (130 °C) max. 0.05 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.01 %
- Iodide (I) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.002 %
- pH (5 %, 25 °C) 5 – 8
- Heavy metals (as Pb) max. 0.0005 %
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1688.0100

POTASSIUM IODIDE

- KI
- M = 166.01 g/mol
- CAS-No. 7681-11-0
- EC-No. 231-659-4
- Density (20 °C) 3.13 g/ml

GHS

- H372
- P260 P314 P501

Danger



Specification

- Colourless solid
- Melting point 686 °C
- Boiling point 1330 °C

POTASSIUM IODIDE PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP (MIN. 99.0 %)

Specification

- Appearance of the solution complies
- Loss on drying max. 0.5 %
- Free alkali max. 0.02 %
- Arsenic (As) max. 0.00001 %
- Barium (Ba) max. 0.002 %
- Calcium (Ca) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Magnesium (Mg) max. 0.001 %
- Sodium (Na) max. 0.03 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.01 %
- Iodate (IO_3) max. 0.0003 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %
- Thiosulphate (S_2O_3) max. 0.01 %
- Nitrogen (N) max. 0.001 %
- Reducing substances complies
- Identity complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1636.1000

POTASSIUM IODIDE P.A., PH. EUR., ISO (MIN. 99.5 %)

Specification

- Loss on drying max. 0.2 %
- Free alkali max. 0.02 %
- Arsenic (As) max. 0.00001 %
- Barium (Ba) max. 0.002 %
- Calcium (Ca) max. 0.001 %
- Iron (Fe) max. 0.0003 %
- Magnesium (Mg) max. 0.001 %
- Sodium (Na) max. 0.03 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.01 %
- Iodate (IO_3) max. 0.0002 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.001 %
- Thiosulphate (S_2O_3) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- pH (5 % solution) 6.0 – 8.0
- Reducing substances complies

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1618.0250



POTASSIUM NITRATE

- KNO_3
- M = 101.10 g/mol
- CAS-No. 7757-79-1
- EC-No. 231-818-8
- Density 2.11 g/ml
- UN-No. 1486
- ADR 5.1, III

GHS
- H272
- P210 P510



Specification
- Colourless to white solid
- Melting point 334 °C
- Boiling point 400 °C

POTASSIUM NITRATE PURISS., BP, FCC (99.0 – 100.5 %)

Specification
- Loss on drying max. 0.5 %
- Ammonium (NH_4) max. 0.005 %
- Arsenic (As) max. 0.0001 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Sodium (Na) max. 0.1 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Nitrite (NO_2) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1678.1000
5 kg	Plastic bottle	1678.5000

POTASSIUM NITRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification
- Ammonium (NH_4) max. 0.001 %
- Calcium (Ca) max. 0.001 %
- Copper (Cu) max. 0.0001 %
- Iron (Fe) max. 0.0002 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0001 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Iodate (IO_3) max. 0.0005 %
- Nitrite (NO_2) max. 0.001 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- Magnesium (Mg) max. 0.0015 %
- Nickel (Ni) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Cadmium (Cd) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- pH (5 %, 25 °C) 5 – 8
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1689.0500
1 kg	Plastic bottle	1689.1000

DI-POTASSIUM OXALATE MONOHYDRATE

- $K_2C_2O_4 \times H_2O$
- M = 184.24 g/mol
- CAS-No. 6487-48-5
- EC Index No. 607-007-00-3
- EC-No. 209-506-8
- Density 2.13 g/ml

GHS
- H302+H312
- P302+P352



Specification
- Colourless solid

DI-POTASSIUM OXALATE MONOHYDRATE P. A., ACS (MIN. 99.5 %)

Specification
- Iron (Fe) max. 0.001 %
- Sodium (Na) max. 0.02 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %
- Nitrogen (N) max. 0.001 %
- Substances darkened by H_2SO_4 complies
- Insoluble matter max. 0.01 %
- Ammonium (NH_4) max. 0.002 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1685.1000

POTASSIUM PERMANGANATE

- $KMnO_4$
- M = 158.03 g/mol
- CAS-No. 7722-64-7
- EC Index No. 025-002-00-9
- EC-No. 231-760-3
- Density 2.70 g/ml
- UN-No. 1490
- ADR 5.1, II

GHS

- H272 H302 H361d H410
- P210 P273 P280 P501



Specification

- Dark violet crystals
- Melting point >240 °C (decomposition)

POTASSIUM PERMANGANATE P. A., ACS, REAG. PH. EUR., REAG. USP (MIN. 99.0 %)

Specification

- Assay (oxidimetric) 99.0 – 100.5 %
- Appearance of solution complies
- Insoluble matter in water max. 0.2 %
- Chloride (Cl) and chlorate (ClO_3) max. 50 ppm
- Sulphate (SO_4) max. 200 ppm
- Identity complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1665.1000

POTASSIUM PEROXODISULPHATE

- $K_2S_2O_8$
- M = 270.33 g/mol
- CAS-No. 7727-21-1
- EC Index No. 016-061-00-1
- EC-No. 231-781-8
- Density 2.48 g/ml
- UN-No. 1492
- ADR 5.1, III

GHS

- H272 H302 H315 H317 H319 H334 H335
- P210 P221 P261 P280 P284 P304+P340 P314 P362+P364 P403+P233



Specification

- Colourless powder
- Melting point 100 °C

POTASSIUM PEROXODISULPHATE P. A., ACS (MIN. 99.0 %)

Specification

- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Manganese (Mn) max. 0.0001 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1621.1000

POTASSIUM SODIUM TARTRATE TETRAHYDRATE

- $KNaC_4H_4O_6 \times 4\ H_2O$
- M = 282.23 g/mol
- CAS-No. 6381-59-5
- EC-No. 206-156-8

Specification

- White solid
- Melting point 70 °C (decomposition)

POTASSIUM SODIUM TARTRATE TETRAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Calcium (Ca) max. 0.004 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- pH (5 %, 25 °C) 6.5 – 8.5
- Insoluble matter in water max. 0.005 %
- Ammonium (NH_4) max. 0.002 %
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1683.0500
1 kg	Plastic bottle	1683.1000
5 kg	Plastic bottle	1683.5000

POTASSIUM SULPHATE

- K_2SO_4
- M = 174.27 g/mol
- CAS-No. 7778-80-5
- EC-No. 231-915-5
- Density 2.66 g/ml

Specification

- Colourless powder
- Melting point 1069 °C
- Boiling point 1689 °C

POTASSIUM SULPHATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Magnesium (Mg) max. 0.002 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.001 %
- Nitrogen (N) max. 0.0005 %
- pH (5 %, 25 °C) 5 – 8
- Heavy metals (as Pb) max. 0.0005 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1697.1000
5 kg	Plastic bottle	1697.5000

POTASSIUM THIOCYANATE

- KSCN
- M = 97.18 g/mol
- CAS-No. 333-20-0
- EC Index No. 615-004-00-3
- EC-No. 206-370-1
- Density 1.89 g/ml

GHS

- H302+H312+H332 H412 EUH032
- P273 P302+P352 P501



Specification

- Colourless solid
- Melting point 175 °C
- Boiling point 500 °C (decomposition)

POTASSIUM THIOCYANATE PURISS. (MIN. 98.0 %)

Specification

- Ammonium (NH_4) max. 0.03 %
- Iron (Fe) max. 0.0005 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.01 %
- Sulphate (SO_4) max. 0.05 %
- Sulphur (S) max. 0.002 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1695.1000

POTASSIUM THIOCYANATE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Insoluble matter max. 0.01 %
- Ammonium (NH_4) max. 0.001 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0001 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.0002 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.001 %
- Sulphur (S) max. 0.001 %
- pH (5 %, 25 °C) 5.3 – 8.5
- Iodide (I) max. 0.025 %
- Insoluble matter in water max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1679.0250

More information about Green Solvents → see page 282

1,3-PROPANEDIOL

- $C_3H_8O_2$
- M = 76.09 g/mol
- CAS-No. 504-63-2
- EC-No. 207-997-3
- Density (20 °C) 1.054 g/ml

Specification

- Clear, viscous liquid
- Melting point -26 °C
- Boiling point 213 °C

1,3-PROPANEDIOL FOR SYNTHESIS, PURE (MIN. 99.7 %)

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.438 – 1.442
- Water (KF) max. 1000 mg/kg
- Colour (Hazen) max. 15

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1180.1000

1-PROPANOL

- C_3H_7OH
- M = 60.10 g/mol
- CAS-No. 71-23-8
- EC Index No. 603-003-00-0
- EC-No. 200-746-9
- Density (20 °C) 0.803 – 0.805 g/ml
- UN-No. 1274
- ADR 3, II

GHS

- H225 H302 H318 H336
- P210 P261 P280 P305+P351+P338 P310 P403+P233



Specification

- Clear liquid
- Boiling point 96 – 98 °C

1-PROPANOL P. A., PH. EUR. (MIN. 99.5 %)

Specification

- Colour (APHA) max. 10
- Refractive index (20 °C) 1.3840 – 1.3860
- Distillation range 96 – 99 °C
- Acidity (as CH_3COOH) max. 0.03 %
- Water (KF) max. 1000 ppm
- Residue on evaporation max. 5 ppm
- Identity (IR) complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1188.1000
2.5 l	Glass bottle	1188.2500

2-PROPANOL

- $CH_3CH(OH)CH_3$
- M = 60.10 g/mol
- CAS-No. 67-63-0
- EC Index No. 603-117-00-0
- EC-No. 200-661-7
- UN-No. 1219
- ADR 3, II

GHS

- H225 H319 H336
- P210 P240 P280 P304+P340 P305+P351+P338 P501



Specification

- Clear, colourless liquid
- Melting point -89 °C
- Boiling point 81 – 83 °C

2-PROPANOL REDIST. (MIN. 99.0 %)

Specification

- Water max. 1 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	3102.2500
5 l	Plastic canister	3102.5000

2-PROPANOL (MIN. 70.0 %)

- Density 0.81 – 0.84 g/ml

Specification

- Assay min. 70.0 % w/v
- Sterile filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1199.1000
1 l	Plastic spray bottle	1199.1009
5 l	Plastic canister	1199.5000

ISOPROPANOL 70 BIOCIDE (MIN. 69.0 %)

Specification

- Refractive index 1.3780 – 1.3737
- Density (20 °C) 0.8593 – 0.8639
- Biocide, BAuA Reg. Nr. N-103210

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1150.1000
5 l	Plastic canister	1150.5000
10 l	Plastic canister	1150.9010
25 l	Plastic canister	1150.9025

2-PROPANOL TECHNICAL GRADE (MIN. 99.8 %)

Specification

- Refractive index (20 °C) 1.375 – 1.378
- Water max. 0.01 %

Quantity	Packaging Material	Art. no.
150 Kg	Metal drum	1175.9150

2-PROPANOL PURE, TECHNICAL GRADE (MIN. 99.8 %)

- Density 0.89 g/ml

Specification

- Acidity (as CH_3COOH) max. 0.002 %
- Refractive index (20 °C) 1.376 – 1.379
- Colour (Hazen) max. 10
- Water max. 0.1 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1155.2511

2-PROPANOL PURE (MIN. 99.0 %)

- Density 0.78 g/ml

Specification

- Non-volatile substances max. 0.002 %
- Water max. 0.1 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1157.1000
5 l	Plastic canister	1157.5000
25 l	Plastic canister	1157.9025

2-PROPANOL PH. EUR. (MIN. 99.9 %)

Specification

- Identity (IR) complies
- Appearance of solution complies
- Refractive index (20 °C) 1.376 – 1.379
- Benzene (C_6H_6) max. 2 ppm
- Other impurities max. 0.3 %
- Non-volatile substances max. 20 ppm
- Water max. 0.5 % m/V
- Absorption at 230 nm max. 0.30 AU
- Absorption at 250 nm max. 0.10 AU
- Absorption at 270 nm max. 0.03 AU
- Absorption at 290 nm max. 0.02 AU
- Absorption at 310 nm max. 0.01 AU
- Relative density 0.785 – 0.789
- Peroxids complies
- Acidic or alkaline substances complies

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1184.1000
25 l	Plastic canister	1184.9025

2-PROPANOL PURISS., DAC, BP, BELG. PHARM. VI, USP (MIN. 99.8 %)

- Density 0.78 g/ml

Specification

- Non-volatile substances max. 0.002 %
- Water max. 0.2 %
- Free acid max. 0.002 %
- Iron (Fe) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0002 %
- Aldehydes and Ketones max. 0.05 %
- Benzene (C_6H_6) max. 0.0002 %
- Methanol (CH_3OH) max. 0.1 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1182.2500
5 l	Plastic canister	1182.5000
25 l	Metal drum	1182.9025

2-PROPANOL PURISS. (MIN. 99.9 %)

Specification

- Appearance of solution complies
- Acidity or alkalinity complies
- Peroxides complies
- Relative density 0.785 – 0.789
- Refractive index (20 °C) 1.376 – 1.379
- Benzene (C_6H_6) max. 2 ppm
- Other impurities max. 0.3 %
- Non-volatile substances max. 20 ppm
- Water max. 0.5 %
- Absorption at 230 nm max. 0.30 AU
- Absorption at 250 nm max. 0.10 AU
- Absorption at 270 nm max. 0.03 AU
- Absorption at 290 nm max. 0.02 AU
- Absorption at 310 nm max. 0.01 AU

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1197.1000
5 l	Plastic canister	1197.5000
10 l	Plastic canister	1197.9010
25 l	Plastic canister	1197.9025
200 l	Metal drum	1197.9200

2-PROPANOL P. A., ACS, ISO, PH. EUR. (MIN. 99.8 %)

- Density 0.784 – 0.786 g/ml

Specification

- Non-volatile substances max. 0.0005 %
- Water max. 0.1 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.00003 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Acetone (CH_3COCH_3) max. 0.002 %
- Ethanol (C_2H_5OH) max. 0.01 %
- Methanol (CH_3OH) max. 0.1 %
- Carbonyl compounds max. 0.002 %
- Reducing substances max. 0.0005 %
- Residue on evaporation max. 0.001 %
- Solubility in water complies
- Colour (APHA) max. 10
- Acidity max. 0.0001 meq/g
- Alkalinity max. 0.0001 meq/g
- Benzene and related substances max. 0.002 %
- Absorption at 230 nm max. 0.300
- Absorption at 250 nm max. 0.100
- Absorption at 270 nm max. 0.030
- Absorption at 290 nm max. 0.020
- Absorption at 310 nm max. 0.010
- Sulphur (S) max. 0.00005 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1136.1000
2.5 l	Glass bottle	1136.2500
2.5 l	Plastic bottle	1136.2511
5 l	Plastic canister	1136.5000
25 l	Metal drum	1136.9025
50 l	Metal drum	1136.9050
200 l	Metal drum	1136.9200

2-PROPANOL FOR HPLC (MIN. 99.8 %)

- Density (20 °C) 0.78 g/ml

Specification

- Refractive index (20 °C) 1.375 – 1.379
- Water (KF) max. 500 mg/kg
- Non-volatile substances max. 7 mg/kg
- Free acids (as CH_3COOH) max. 10 mg/kg
- UV transmittance at 210 nm min. 20 %
- UV transmittance at 230 nm min. 75 %
- UV transmittance at 260 nm min. 98 %
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1164.1000
2.5 l	Glass bottle	1164.2500

2-PROPANOL FOR LC-MS (MIN. 99.95 %)

- Density (20 °C) 0.78 g/ml

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.375 – 1.379
- Water (KF) max. 200 mg/kg
- Residue on evaporation max. 2 mg/kg
- Free acids (as CH_3COOH) max. 0.0010 %
- Free alkali (as NH_3) max. 0.0005 %
- UV transmittance at 220 nm min. 64.0 %
- UV transmittance at 230 nm min. 80.0 %
- UV transmittance at 260 nm min. 98.5 %
- HPLC gradient test complies
- HPLC gradient (peak) at 254 nm max. 2 mAU
- Aluminium (Al) max. 0.000005 %
- Iron (Fe) max. 0.000005 %
- Sodium (Na) max. 0.000005 %
- Calcium (Ca) max. 0.000005 %
- Magnesium (Mg) max. 0.000005 %
- Potassium (K) max. 0.000005 %
- Sensitive impurities (reserpine) max. 100 ppb
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1178.1000
2.5 l	Glass bottle	1178.2500

2-PROPANOL FOR UHPLC-MS (MIN. 99.95 %)

- Density 0.785 g/ml

Specification

- Colorless liquid free of particles complies
- Residue on evaporation max. 0.0001 % w/w
- Water (KF) max. 0.05 % w/w
- Acidity max. 0.0002 meq/g
- Alkalinity max. 0.0001 meq/g
- UHPLC-MS suitability test complies
- Gradient test at 235 nm max. 1.0 mAU
- Gradient test at 254 nm max. 1.0 mAU
- Aluminium (Al) max. 20 ppb
- Fluorescence (as quinine) at 254 nm max. 0.5 AU
- Fluorescence (as quinine) at 365 nm max. 0.5 AU
- UV-Absorption at 210 nm max. 0.50 AU
- UV-Absorption at 220 nm max. 0.10 AU
- UV-Absorption at 230 nm max. 0.05 AU
- UV-Absorption at 254 nm max. 0.005 AU
- Calcium (Ca) max. 50 ppb
- Iron (Fe) max. 20 ppb
- Potassium (K) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Sodium (Na) max. 50 ppb
- Lead (Pb) max. 20 ppb
- Filtered through 0.1 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1179.1000
2.5 l	Glass bottle	1179.2500

2-PROPANOL VLSI (MIN. 99.8 %)

Specification

- Assay (GC, on anhydrous basis) 99.8 – 100.0 %
- Colour (APHA) max. 10
- Residue on evaporation max. 0.0003 % w/w
- Water (KF) max. 0.05 % w/w
- Acidity (as CH_3COOH) max. 0.001 %
- Alkalinity (as NH_3) max. 0.0002 %
- Chloride (Cl) max. 0.1 ppm
- Phosphate (PO_4) max. 0.3 ppm
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 20 ppb
- Arsenic (As) max. 10 ppb
- Gold (Au) max. 10 ppb
- Boron (B) max. 10 ppb
- Barium (Ba) max. 10 ppb
- Beryllium (Be) max. 10 ppb
- Bismuth (Bi) max. 30 ppb
- Calcium (Ca) max. 30 ppb
- Cadmium (Cd) max. 20 ppb
- Cobalt (Co) max. 20 ppb
- Chromium (Cr) max. 20 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 25 ppb
- Gallium (Ga) max. 20 ppb
- Germanium (Ge) max. 20 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 30 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 15 ppb
- Molybdenum (Mo) max. 20 ppb
- Sodium (Na) max. 50 ppb
- Niobium (Nb) max. 20 ppb
- Nickel (Ni) max. 10 ppb
- Antimony (Sb) max. 10 ppb
- Silicon (Si) max. 30 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 20 ppb
- Tantalum (Ta) max. 20 ppb
- Titanium (Ti) max. 20 ppb
- Thallium (Tl) max. 10 ppb
- Vanadium (V) max. 20 ppb
- Zinc (Zn) max. 30 ppb
- Zirconium (Zr) max. 30 ppb
- Particle count > 0.5 µm max. 100 P/ml
- Particle count > 1.0 µm max. 10 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1138.2500
5 l	Plastic bottle	1138.5000
25 l	Plastic canister	1138.9025

2-PROPANOL VLSI (MIN. 99.9 %)

Specification

- Assay (GC, on anhydrous basis) min. 99.9 %
- Colour (APHA) max. 10
- Residue on evaporation max. 5 ppm
- Water (KF) max. 1000 ppm
- Acidity (as CH_3COOH) max. 0.2 µeq/g
- Alkalinity max. 0.1 µeq/g
- Chloride (Cl) max. 1 ppm
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 20 ppb
- Arsenic (As) max. 10 ppb
- Gold (Au) max. 20 ppb
- Boron (B) max. 20 ppb
- Barium (Ba) max. 20 ppb
- Antimony (Sb) max. 10 ppb
- Bismuth (Bi) max. 10 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Cooper (Cu) max. 10 ppb
- Iron (Fe) max. 50 ppb
- Gallium (Ga) max. 10 ppb
- Potassium (K) max. 20 ppb
- Lithium (Li) max. 10 ppb
- Magnesium (Mg) max. 50 ppb
- Manganese (Mn) max. 10 ppb
- Molybdenum (Mo) max. 10 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max. 10 ppb
- Tin (Sn) max. 10 ppb
- Strontium (Sr) max. 20 ppb
- Vanadium (V) max. 10 ppb
- Zinc (Zn) max. 20 ppb
- Particle count > 0.5 µm max. 250 P/ml
- Sulphate (SO_4) max. 1 ppm
- Nitrate (NO_3) max. 1 ppm
- Sulfite (SO_3) max. 1 ppm
- Filtered through 0.2 µm
- Filled under Inertgas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	6502.2511
		6502.5000

PROPYLENE GLYCOL (1,2-PROPANEDIOL)

- $C_3H_8O_2$
- M = 76.09 g/mol
- CAS-No. 57-55-6
- EC-No. 200-338-0

Specification

- Clear, colourless, viscous liquid

PROPYLENE GLYCOL USP

Specification

- Monopropylene glycol min. 99.7 %
- Diethylene glycol max. 0.1 %
- Water max. 0.2 %
- Colour (Hazen) max. 10
- Refractive index (20 °C) 1.431 – 1.433
- Sulphated ash max. 100 mg/kg
- Chloride (Cl) max. 1 mg/kg
- Sulphate (SO_4) max. 60 mg/kg
- Arsenic (As) max. 3 mg/kg
- Heavy metals max. 5 mg/kg
- Oxidizing substances complies
- Reducing substances complies
- Iron (Fe) max. 0.5 mg/kg
- Acid (as CH_3COOH) max. 0.002 %
- Volatile organic compounds (VOC) complies
- This product complies to EP, USP and the purity requirements of (EU) VO 231/2012 [E1520].

Quantity	Packaging Material	Art. no.
25 l	Steel can	6500.9025

PROTEINASE

- CAS-No. 39450-01-6
- EC Index No. 647-014-00-9
- EC-No. 254-457-8

GHS

- H315 H319 H334 H335
- P261 P302+P352 P304+P341 P305+P351+P338

Danger



Specification

- White powder

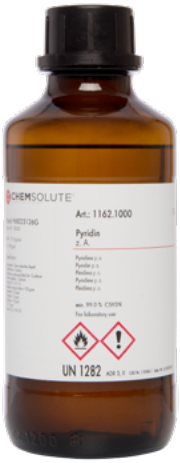
PROTEINASE K LYOPHILIZED FROM PARENGYODONTIUM ALBUM (TRITIRACHIUM ALBUM) MOLECULAR BIOLOGY GRADE

Specification

- Solubility in water min. 20 mg/ml
- Enzyme activity min. 30.0 U/mg lyophilizate
- Specific activity min. 40.0 U/mg lyophilizate
- DNA content max. 10 pg/mg
- Exonucleases not detectable
- Endonucleases not detectable
- Ribonucleases not detectable
- Storage -20 °C to -25 °C

Quantity	Packaging Material	Art. no.
100 mg	Vial	8433.1100
500 mg	Vial	8433.1500
10 g	Glass bottle	8433.0010
25 g	Glass bottle	8433.0025
50 g	Glass bottle	8433.0050









PYRIDINE

- C_5H_5N
- M = 79.10 g/mol
- CAS-No. 110-86-1
- EC Index No. 613-002-00-7
- EC-No. 203-809-9
- Density 0.98 g/ml
- UN-No. 1282
- ADR 3, II

GHS

- H225 H302+H312+H332
- P210 P233 P241 P243 P261 P280 P303+P361+P353 P304+P340 P312 P403+P235 P501



Specification

- Clear, colourless liquid
- Melting point -42 °C
- Boiling point 114.2 – 116.2 °C

PYRIDINE P. A., ACS, USP, PH. EUR. (MIN. 99.0 %)

Specification

- Identity complies
- Water (KF) max. 0.1 %
- Residue on evaporation max. 20 ppm
- Ammonium (NH_4) max. 20 ppm
- Chloride (Cl) max. 10 ppm
- Sulphate (SO_4) max. 10 ppm
- Copper (Cu) max. 5 ppm
- Substances reducing $KMnO_4$ complies
- Solubility in water complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1162.1000
2.5 l	Glass bottle	1162.2500

D-RAFFINOSE PENTAHYDRATE

- $C_{18}H_{32}O_{16}$ x 5 H_2O
- M = 594.52 g/mol
- CAS-No. 17629-30-0
- EC-No. 208-146-9
- Density 1.465 g/ml

Specification

- White solid
- Melting point 80 °C

D-RAFFINOSE PENTAHYDRATE (MIN. 97.0 %)

Specification

- Water 14.0 – 16.0 %
- Heavy metals max. 0.001 %
- Reducing substances max. 1.0 %

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	8277.0025

RUBIDIUM CHLORIDE

- RbCl
- M = 120.92 g/mol
- CAS-No. 7791-11-9
- EC-No. 232-240-9
- Density 2.76 g/ml

Specification

- Colourless solid
- Melting point 715 °C
- Boiling point 1390 °C

RUBIDIUM CHLORIDE P. A. (MIN. 99.5 %)

Specification

- Aluminium (Al) max. 0.001 %
- Copper (Cu) max. 0.0003 %
- Iron (Fe) max. 0.0003 %
- Magnesium (Mg) max. 0.0005 %
- Lead (Pb) max. 0.0003 %
- Zinc (Zn) max. 0.0003 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.003 %

Quantity	Packaging Material	Art. no.
10 g	Plastic bottle	990.0010

SEA SAND

- SiO_2
- M = 60.09 g/mol
- CAS-No. 14808-60-7
- EC-No. 231-545-4
- Density 2.66 g/ml

SEA SAND PURIFIED BY ACID AND CALCINED P. A., DAB

Specification

- Acid-soluble iron (Fe) max. 0.01 %
- Acid-soluble substances max. 0.15 %
- Loss on ignition max. 0.05 %
- Chloride (Cl) max. 0.005 %
- Particle size 0.1 – 0.3 mm

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	804.1000
25 kg	Fibre drum	804.9025

SILICA GEL

- SiO_2
- CAS-No. 7631-86-9
- EC-No. 231-545-4

SILICA GEL 60 (0.063 – 0.2 MM) FOR COLUMN CHROMATOGRAPHY (70 – 230 MESH)

Specification

- White solid
- Spec. surface 500 ±50 m^2/g
- Pore volume 0.75 ±0.1 ml/g
- Mean pore size 60 ±10 Å
- pH 6.0 – 7.5
- Water max. 7 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1605.1000
2.5 kg	Plastic bucket	1605.2500

SILICA GEL WITH HUMIDITY INDICATOR COBALT FREE (GRANULES)

Specification

- Brownish granular
- Identity complies
- Colour change:
- Amber brown: dry, full drying efficiency
- Aquamarine green: humid, exhausted efficiency
- Grain size 2.5 – 6 mm

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1616.1000
5 kg	Plastic bottle	1616.5000
25 kg	Plastic bucket	1616.9025

SILICA GEL WITH HUMIDITY INDICATOR COBALT FREE (PEARLS) 1-3 MM

Specification

- Brownish pearls

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1620.1000

SILICA GEL WITH HUMIDITY INDICATOR COBALT FREE (PEARLS) 3-5 MM

Specification

- Brownish pearls

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1626.1000

SILVER NITRATE

- $AgNO_3$
- M = 169.87 g/mol
- CAS-No. 7761-88-8
- EC Index No. 047-001-00-2
- EC-No. 231-853-9
- Density 4.35 g/ml
- UN-No. 1493
- ADR 5.1, II

GHS
- H272 H312 H314 H410
- P273 P280 303+P361+P353 P305+P351+P338 P308+P311 P391 P501

Danger



Specification
- Colourless to white solid
- Melting point 212 °C
- Boiling point 440 °C

SILVER NITRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.99 %)

Specification
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0002 %
- Iron (Fe) max. 0.0002 %
- Manganese (Mn) max. 0.0005 %
- Lead (Pb) max. 0.001%
- Zinc (Zn) max. 0.0001 %
- Chloride (Cl) max. 0.0001 %
- Nitrite (NO_2) max. 0.05 %
- Sulphate (SO_4) max. 0.002 %
- Clarity of solution complies
- Free Acids complies
- Substances not precipitated by hydrochloric acid max. 0.01 %

Quantity	Packaging Material	Art. no.
50 g	Plastic bottle	878.0050
250 g	Plastic bottle	878.0250

SILVER SULPHATE

- Ag_2SO_4
- M = 311.77 g/mol
- CAS-No. 10294-26-5
- EC-No. 233-653-7
- Density 5.45 g/ml
- UN-No. 3077
- ADR 9, III

GHS
- H315 H319 H335 H400
- P273 P305+P351+P338 P501

Warning



Specification
- Colourless solid
- Melting point 652 °C
- Boiling point 1085 °C

SILVER SULPHATE P. A., ACS (MIN. 99.5 %)

Specification
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Nickel (Ni) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Nitrate (NO_3) max. 0.001 %
- Insoluble matter max. 0.02 %
- Substances not precipitated by hydrochloric acid max. 0.03 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	887.0100







Volumetric solutions → page 184, 194

SODIUM ACETATE

- CH_3COONa
- M = 82.03 g/mol
- CAS-No. 127-09-3
- EC-No. 204-823-8

Specification

- White powder

SODIUM ACETATE ANHYDROUS P. A., ACS, PH. EUR., USP (MIN. 99.0 %)

Specification

- Chloride (Cl) max. 0.002 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.003 %
- Aluminium (Al) max. 0.001 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0003 %
- Iron (Fe) max. 0.05 ppm
- Potassium (K) max. 0.05 %
- Magnesium (Mg) max. 0.002 %
- Heavy metals (as Pb) max. 0.001 %
- pH (5 %, 25 °C) 7.5 – 9.0
- Loss on drying max. 1.0 %
- Non-volatile substances max. 0.01 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	8694.1000
2.5 kg	Plastic bottle	8694.2500
25 kg	Plastic bucket	8694.9025

SODIUM ACETATE TRIHYDRATE

- $CH_3COONa \times 3\ H_2O$
- M = 136.08 g/mol
- CAS-No. 6131-90-4
- EC-No. 204-823-8
- Density 1.42 g/ml

Specification

- Colourless to white solid
- Melting point 58 °C

SODIUM ACETATE TRIHYDRATE PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP, FCC (99.0 – 101.0 %)

Specification

- Aluminium (Al) max. 0.00002 %
- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.002 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Reducing substances max. 0.002 %
- Appearance of solution complies
- pH (5 %, 25 °C) 7.5 – 9.0
- Loss on drying complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1322.1000
5 kg	Plastic bottle	1322.5000

SODIUM ACETATE TRIHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Aluminium (Al) max. 0.00002 %
- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- Reducing substances max. 0.005 %
- pH (5 %, 25 °C) 7.5 – 9
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1307.0500
1 kg	Plastic bottle	1307.1000
5 kg	Plastic bottle	1307.5000

SODIUM AZIDE

- NaN_3
- M = 65.01 g/mol
- CAS-No. 26628-22-8
- EC Index No. 011-004-00-7
- EC-No. 247-852-1
- UN-No. 1687
- ADR 6.1, II

GHS
- H300+H310 H410 EUH032
- P273 P301+P310 P330 P501



SODIUM AZIDE P. A. (MIN. 99.5 %)

Specification
- Insoluble matter max. 0.01 %
- Solubility in water 420 g/l
- Chloride (Cl) max. 0.001 %
- Heavy metals (as Pb) max. 0.005 %
- Loss on drying max. 0.1 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	8690.0250

SODIUM BENZOATE

- $C_7H_5NaO_2$
- M = 144.11 g/mol
- CAS-No. 532-32-1
- EC-No. 208-534-8
- Density 1.5 g/ml

Specification
- Colourless solid
- Melting point 436 °C

SODIUM BENZOATE PURISS., PH. EUR., BP, NF, J. P., FCC (99.0 – 100.5 %)

Specification
- Chloride (Cl) max. 0.02 %
- Sulphate (SO_4) max. 0.01 %
- Heavy metals (as Pb) max. 0.001 %
- Arsenic (As) max. 0.0001 %
- Cadmium (Cd) max. 0.001 %
- Copper (Cu) max. 0.001 %
- Mercury (Hg) max. 0.0001 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Loss on drying max. 1.5 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1334.1000

SODIUM BOROHYDRIDE

- $NaBH_4$
- M = 37.83 g/mol
- CAS-No. 16940-66-2
- EC-No. 241-004-4
- Density 1.07 g/ml
- UN-No. 1426
- ADR 4.3, I

GHS
- H260 H301+H311 H314
- P280 P301+P330+P331 P302+P352 P305+P351+P338 P308+P311 P501



Specification
- Colourless solid
- Melting point 400 °C
- Boiling point 500 °C

SODIUM BOROHYDRIDE P. A. (MIN. 95.0 %)

GHS
- P280 P301+P330+P331 P302+P352 P305+P351+P338 P309 P310 P402+P404 P501

Specification
- Arsenic (As) max. 0.001 %
- Bismuth (Bi) max. 0.0005 %
- Iron (Fe) max. 0.005 %
- Mercury (Hg) max. 0.001 %
- Antimony (Sb) max. 0.005 %
- Selenium (Se) max. 0.0002 %
- Chloride (Cl) max. 0.5 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1386.0100

SODIUM CARBONATE

- Na_2CO_3
- M = 105.99 g/mol
- CAS-No. 497-19-8
- EC Index No. 011-005-00-2
- EC-No. 207-838-8
- Density 2.53 g/ml

GHS
- H319
- P264 P280 P305+P351+P338 P337+P313

Warning



Specification
- Colourless powder
- Melting point 854 °C
- Boiling point 1600 °C

SODIUM CARBONATE ANHYDROUS P. A., ACS, ISO, PH. EUR. (MIN. 99.8 %)

Specification
- Aluminium (Al) max. 0.001 %
- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.003 %
- Phosphate (PO_4) max. 0.001 %
- Silicate (SiO_2) max. 0.002 %
- Nitrogen (N) max. 0.001 %
- Loss on drying (300 °C) max. 0.5 %
- Heavy metals (as Pb) max. 0.0005 %
- Sulphur (S) max. 0.005 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1393.1000
2.5 kg	Plastic bottle	1393.2500

SODIUM CARBONATE DECAHYDRATE

- Na_2CO_3 x 10 H_2O
- M = 286.14 g/mol
- CAS-No. 6132-02-1
- EC Index No. 011-005-00-2
- EC-No. 207-838-8
- Density 1.44 g/ml

GHS
- H319
- P280 P305+P351+P338

Warning



Specification
- Colourless solid
- Melting point 33 °C

SODIUM CARBONATE DECAHYDRATE P. A., ISO, PH. EUR. (MIN. 99.0 %)

Specification
- Aluminium (Al) max. 0.0005 %
- Arsenic (As) max. 0.00001 %
- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0002 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.0002 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Nitrogen (N) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- Phosphate (PO_4) max. 0.001 %
- Silicate (SiO_2) max. 0.001 %
- Sulphur (S) max. 0.003 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1311.1000

SODIUM CHLORIDE

- NaCl
- M = 58.44 g/mol
- CAS-No. 7647-14-5
- EC-No. 231-598-3

Specification

- Colourless crystals or white, crystalline powder
- Melting point 800 °C
- Boiling point 1461 °C

SODIUM CHLORIDE P. A., PH. EUR. (99.0 – 100.5 %)

Specification

- Without anti-caking agent
- Identity complies
- Appearance of the solution (20 %) complies
- Acidity (0.01 M NaOH) max. 0.5 ml
- Alkalinity (0.01 M HCl) max. 0.5 ml
- Bromide (Br) max. 50 mg/kg
- Hexacyanoferrates ($Fe(CN)_6$) max. 0.5 mg/kg
- Iodide (I) complies
- Nitrite (NO_2) (Absorbance at 354 nm) max. 0.01
- Phosphate (PO_4) max. 25 mg/kg
- Sulphate (SO_4) max. 150 mg/kg
- Aluminium (Al) max. 0.2 mg/kg
- Arsenic (As) max. 0.5 mg/kg
- Barium (Ba) max. 1 mg/kg
- Heavy metals (as Pb) max. 5 mg/kg
- Iron (Fe) max. 0.8 mg/kg
- Calcium (Ca) max. 20 mg/kg
- Magnesium (Mg) max. 21 mg/kg
- Potassium (K) max. 300 mg/kg
- Loss on drying max. 0.5 %
- Endotoxins max. 5.0 I.U./g
- pH 4.5 – 7.0

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1367.1000
5 kg	Plastic bucket	1367.5000
25 kg	Plastic bucket	1367.9025

SODIUM CHLORIDE P. A., REAG. PH. EUR., REAG. USP (99.0 – 100.5 %)

Specification

- Assay 99.0 – 100.5 %
- Identity complies
- Appearance of the solution complies
- Acidity or alkalinity complies
- pH (5 %, 25 °C) 5.0 – 9.0
- Loss on drying max. 0.5 %
- Bromide (Br) max. 100 ppm
- Nitrate (NO_3) max. 30 ppm
- Phosphate (PO_4) max. 5 ppm
- Water-insoluble matter max. 50 ppm
- Iodide (I) max. 20 ppm
- Heavy metals (as Pb) max. 5 ppm
- Magnesium (Mg) and other alkali metals max. 100 ppm
- Nitrite (NO_2) entspricht
- Sulphate (SO_4) max. 40 ppm
- Arsenic (As) max. 1 ppm
- Barium (Ba) entspricht
- Calcium (Ca) max. 20 ppm
- Iron (Fe) max. 2 ppm
- Potassium (K) max. 50 ppm
- Magnesium (Mg) max.10 ppm
- Iodide (I) Ph. Eur. complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	6307.1000
5 kg	Plastic bottle	6307.5000
25 kg	Drum	6307.9025

SODIUM CHLORIDE P. A., ASTM B117, ISO 9227/2017 (MIN. 99.8 %)

Specification

- Without anti-caking agent
- Assay (argentometric) min. 99.8 %
- Identity complies
- Heavy metals (as Pb) max. 5 ppm
- Loss on drying max. 0.5 %
- Copper (Cu) max. 0.3 ppm
- Nickel (Ni) max. 10 ppm
- Other halogens (I, Br, F) max. 0.1 %
- Total impurities max. 0.3 %
- Sodium iodide (NaI) max. 0.1 %

Quantity	Packaging Material	Art. no.
5 kg	Plastic bottle	1399.5000
25 kg	Plastic bucket	1399.9025

TRI-SODIUM CITRATE DIHYDRATE

- $C_6H_5Na_3O_7$ x 2 H_2O
- M = 294.1 g/mol
- CAS-No. 6132-04-3
- EC-No. 200-675-3
- Density 1.98 g/ml

Specification

- Colourless crystals or white, crystalline powder
- Melting point 150 °C

TRI-SODIUM CITRATE DIHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Insoluble matter in water max. 0.005 %
- pH (5 %, 25 °C) 7.5 – 9.0
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.002 %
- Sulphate (SO_4) max. 0.001 %
- Ammonium (NH_4) max. 0.003 %
- Heavy metals (as Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Nitrogen (N) max. 0.001 %
- Copper (Cu) max. 0.0005 %
- Lead (Pb) max. 0.0002 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0005 %
- Oxalate (C_2O_4) max. 0.02 %
- Water 11 – 13 %
- Readily carbonizable substances complies

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1328.1000

SODIUM DICHLOROISOCYANURATE

- $C_3Cl_2N_3NaO_3$
- M = 219.95 g/mol
- CAS-No. 2893-78-9
- EC Index No. 613-030-00-X
- EC-No. 220-767-7
- UN-No. 2465
- ADR 5.1, II

GHS

- H272 H302 H319 H335 H410 EUH031
- P220 P261 P273 P305+P351+P338 P501



Specification

- Colourless solid

SODIUM DICHLOROISOCYANURATE PURISS. (MIN. 98.0 %)

Quantity	Packaging Material	Art. no.
100 g	Glass bottle	1316.0100

SODIUM DIETHYLDITHIOCARBAMATE TRIHYDRATE

- $C_5H_{10}NNaS_2$ x 3 H_2O
- M = 225.31 g/mol
- CAS-No. 20624-25-3
- EC-No. 205-710-6
- Density 1 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H400
- P273 P501



Specification

- Colourless solid
- Melting point 93 °C

SODIUM DIETHYLDITHIOCARBAMATE TRIHYDRATE P. A., ACS (MIN. 97.0 %)

Specification

- Solubility in water complies
- Reagent for copper determination

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1308.0100

SODIUM DIHYDROGEN PHOSPHATE DIHYDRATE

- NaH_2PO_4 x 2 H_2O
- M = 156.01 g/mol
- CAS-No. 13472-35-0
- EC-No. 231-449-2
- Density 1.92 g/ml

Specification

- Colourless to white solid
- Melting point 60 °C

SODIUM DIHYDROGEN PHOSPHATE DIHYDRATE PURISS., DAB, PH. EUR., BP, USP, FCC (98.0 – 100.5 %)

Specification

- Loss on drying 21.5 – 24.0 %
- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.0005 %
- Magnesium (Mg) max. 0.002 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Fluoride (F) max. 0.001 %
- Sulphate (SO_4) max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1357.1000
5 kg	Plastic bottle	1357.5000

SODIUM DIHYDROGEN PHOSPHATE DIHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Magnesium (Mg) max. 0.002 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Fluoride (F) max. 0.001 %
- Sulphate (SO_4) max. 0.02 %
- Heavy metals (as Pb) max. 0.0005 %
- Mercury (Hg) max. 0.0001 %
- Reducing substances max. 0.04 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1346.1000

SODIUM DIHYDROGEN PHOSPHATE MONOHYDRATE

- NaH_2PO_4 x H_2O
- M = 137.99 g/mol
- CAS-No. 10049-21-5
- EC-No. 231-449-2
- Density 2.04 g/ml

Specification

- Colourless to white solid
- Melting point 100 °C

SODIUM DIHYDROGEN PHOSPHATE MONOHYDRATE P. A., ACS (99.0 – 102.0 %)

Specification

- Insoluble matter max. 0.01 %
- Sulphate (SO_4) max. 0.002 %
- Nitrogen (N) max. 0.001 %
- Potassium (K) max. 0.005 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0005 %
- Arsenic (As) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Cadmium (Cd) max. 0.0001 %
- Copper (Cu) max. 0.0001 %
- Chromium (Cr) max. 0.0001 %
- Nickel (Ni) max. 0.0001 %
- Heavy metals (as Pb) max. 0.0005 %
- pH (5 %, 25 °C) 4.1 – 4.5

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1373.0500
1 kg	Plastic bottle	1373.1000
25 kg	Fibre drum	1373.9025

SODIUM DODECYL SULPHATE

- $NaC_{12}H_{25}SO_4$
- M = 288.38 g/mol
- CAS-No. 151-21-3
- EC-No. 205-788-1
- Density 1.1 g/ml
- UN-No. 1325
- ADR 4.1, III

GHS

- H228 H302+H332 H315 H318 H335 H412
- P210 P261 P273 P280 P305+P351+P338 P501



Specification

- Colourless to white solid
- Melting point 204 – 207 °C

SODIUM DODECYL SULPHATE PURISS. (MIN. 98.0 %)

Specification

- Loss on drying max. 2 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0005 %
- Cobalt (Co) max. 0.0005 %
- Chromium (Cr) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.02 %
- Magnesium (Mg) max. 0.0005 %
- Manganese (Mn) max. 0.0005 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.01 %
- Phosphate (PO_4) max. 0.0001 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1347.0100
1 kg	Plastic bottle	1347.1000

SODIUM FLUORIDE

- NaF
- M = 41.99 g/mol
- CAS-No. 7681-49-4
- EC Index No. 009-004-00-7
- EC-No. 231-667-8
- Density 2.8 g/ml
- UN-No. 1690
- ADR 6.1, III

GHS

- H301 H315 H319 EUH032
- P302+P352 P305+P351+P338 P308+P311 P405 P501



Specification

- Colourless to white solid
- Melting point 996 °C
- Boiling point 1704 °C

SODIUM FLUORIDE PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP (98.5 – 100.5 %)

Specification

- Loss on drying max. 0.5 %
- Free acid max. 0.2 %
- Free alkali max. 0.1 %
- Iron (Fe) max. 0.005 %
- Heavy metals (as Pb) max. 0.002 %
- Sodium hexafluorosilicate ($Na_2[SiF_6]$) max. 0.2 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1319.1000

SODIUM FLUORIDE P. A., ACS, ISO, PH. EUR. (MIN. 99.0 %)

Specification

- Loss on drying (150 °C) max. 0.2 %
- Free acid max. 0.05 %
- Free alkali max. 0.04 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Heavy metals (as Pb) max. 0.001 %
- Sodium hexafluorosilicate ($Na_2[SiF_6]$) max. 0.1 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %
- Sulfite (SO_3) max. 0.005 %
- Insoluble matter in water max. 0.02 %
- Insoluble matter max. 0.02 %
- Acidity max. 0.03 meq/g
- Alkalinity max. 0.01 meq/g
- Potassium (K) max. 0.02 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1313.0250
1 kg	Plastic bottle	1313.1000

SODIUM HYDROGEN CARBONATE

- $NaHCO_3$
- M = 84.01 g/mol
- CAS-No. 144-55-8
- EC-No. 205-633-8
- Density 2.2 g/ml

SODIUM HYDROGEN CARBONATE P. A., ACS, PH. EUR., ISO (MIN. 99.7 %)

Specification

- Ammonium (NH_4) max. 0.0005 %
- Calcium (Ca) max. 0.005 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Reducing substances max. 0.005 %
- Sulphate (SO_4) max. 0.003 %
- Insoluble matter max. 0.015 %
- Heavy metals (as Pb) max. 0.0005 %
- Total nitrogen (N) max. 0.0005 %
- Iodide (I) max. 0.0065 %
- Silicate (SiO_2) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	8630.1000
5 kg	Plastic bottle	8630.5000
25 kg	Fibre drum	8630.9025

DI-SODIUM HYDROGEN PHOSPHATE

- Na_2HPO_4
- M = 141.96 g/mol
- CAS-No. 7558-79-4
- EC-No. 231-448-7

Specification

- Colourless to white solid
- Melting point 250 °C

DI-SODIUM HYDROGEN PHOSPHATE ANHYDROUS P. A., ACS (MIN. 99.0 %)

Specification

- Loss on drying max. 0.2 %
- Arsenic (As) max. 0.0001 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.01 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- pH (5 %, 25 °C) 8.7 – 9.3
- Insoluble matter max. 0.01 %
- Heavy metals (as Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1329.0500
1 kg	Plastic bottle	1329.1000
2.5 kg	Plastic bottle	1329.2500

DI-SODIUM HYDROGEN PHOSPHATE DIHYDRATE

- $Na_2HPO_4 \times 2\ H_2O$
- M = 177.99 g/mol
- CAS-No. 10028-24-7
- EC-No. 231-448-7

Specification

- White, crystalline powder

DI-SODIUM HYDROGEN PHOSPHATE DIHYDRATE P. A., DAB (MIN. 99.5 %)

Specification

- Ammonium (NH_4) max. 0.001 %
- Arsenic (As) max. 0.0001 %
- Iron (Fe) max. 0.0005 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Loss on drying 20.0 – 20.4 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8622.0500
1 kg	Plastic bottle	8622.1000
2.5 kg	Plastic bottle	8622.2500
5 kg	Plastic bottle	8622.5000

DI-SODIUM HYDROGEN PHOSPHATE DODECAHYDRATE

- Na_2HPO_4 x 12 H_2O
- M = 358.14 g/mol
- CAS-No. 10039-32-4
- EC-No. 231-448-7
- Density 1.52 g/ml

Specification

- Colourless solid

DI-SODIUM HYDROGEN PHOSPHATE DODECAHYDRATE PURISS., DAB, PH. EUR., BP, PH. FRANÇ. (98.5 – 101.0 %)

Specification

- pH (50 g/l H_2O) 9.0 – 9.4
- Sodium dihydrogen phosphate (NaH_2PO_4) max. 0.5 %
- Water 57.0 – 61.0 %
- Arsenic (As) max. 0.0001 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Zinc (Zn) max. 0.001 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Fluoride (F) max. 0.001 %
- Sulphate (SO_4) max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1310.1000
2.5 kg	Plastic bottle	1310.2500
5 kg	Plastic bottle	1310.5000

DI-SODIUM HYDROGEN PHOSPHATE DODECAHYDRATE P. A., PH. EUR., ISO (MIN. 99.0 %)

Specification

- pH (50 g/l H_2O) 9.0 – 9.4
- Sodium dihydrogen phosphate (NaH_2PO_4) max. 0.5 %
- Arsenic (As) max. 0.00005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Lead (Pb) max. 0.0002 %
- Zinc (Zn) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Nitrogen (N) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1349.1000

SODIUM HYDROXIDE

- NaOH
- M = 40.00 g/mol
- CAS-No. 1310-73-2
- EC Index No. 011-002-00-6
- EC-No. 215-185-5
- Density 2.3 g/ml
- UN-No. 1823
- ADR 8, II

GHS

- H314
- P260 P264 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P405 P501

Danger



Specification

- White solid
- Melting point 324 °C
- Boiling point 1390 °C

SODIUM HYDROXIDE PHARMACEUTICALLY PURE, EN 896 (FLAKES) (MIN. 98.0 %)

Specification

- Sodium carbonate (Na_2CO_3) max. 0.3 %

Quantity	Packaging Material	Art. no.
5 kg	Plastic bottle	1314.5000

SODIUM HYDROXIDE PH. EUR., NF, BP, JP, FCC, EU 231/2012 (PELLETS) (MIN. 98.0 %)

Specification

- Identity complies
- Appearance of solution complies
- Insoluble organic substances complies
- Sodium (Na) 54.0 – 59.8 %
- Sodium carbonate (Na_2CO_3) max. 0.5 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (als Pb) max. 0.002 %
- Lead (Pb) max. 0.00005 %
- Iron (Fe) max. 0.001 %
- Mercury (Hg) max. 0.00001 %
- Chloride (Cl) max. 0.01 %
- Potassium (K) max. 0.5 %
- Solvent residues process technically excluded

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1372.1000
5 kg	Plastic bucket	1372.5000

SODIUM HYDROXIDE P. A. (MICRO GRANULES) (MIN. 99.5 %)

Specification

- Sodium carbonate (Na_2CO_3) max. 0.5 %
- Phosphate (PO_4) max. 0.0002 %
- Silicate (SiO_2) max. 0.0001 %
- Sulphate (SO_4) max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Aluminium (Al) max. 0.0006 %
- Cadmium (Cd) max. 0.00000035 %
- Magnesium (Mg) max. 0.00005 %
- Copper (Cu) max. 0.0000011 %
- Nickel (Ni) max. 0.0002 %
- Lead (Pb) max. 0.0000025 %
- Silver (Ag) max. 0.00005 %
- Calcium (Ca) max. 0.0002 %
- Iron (Fe) max. 0.00042 %
- Arsenic (As) max. 0.0001 %
- Sodium chloride (NaCl) max. 0.005 %
- Iron oxide (Fe_2O_3) max. 0.002 %
- Mercury (Hg) max. 0.0001 %
- Chromium (Cr) max. 0.0004 %
- Selenium (Se) max. 0.0001 %
- Antimony (Sb) max. 0.00025 %
- Potassium (K) max. 0.036 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1355.1000
5 kg	Plastic bottle	1355.5000

SODIUM HYDROXIDE SOLUTION

- M = 40.00 g/mol
- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P234 P280 P301+P330+P331 P303+P331 P305+P351+P338 P310 P390 P501

Danger



Specification

- Colourless liquid

SODIUM HYDROXIDE SOLUTION 5 % TECHNICAL GRADE (4.0 – 6.0 %)

- Density (20 °C) 1.042 – 1.065 g/ml

Specification

- Heavy metals max. 5 ppm
- Iron (Fe) max. 3 ppm

Quantity	Packaging Material	Art. no.
30 kg	Plastic canister	1324.9030

SODIUM HYDROXIDE SOLUTION 15 % TECHNICAL GRADE (14.0 – 16.0 %)

Specification

- Sodium chloride (NaCl) max. 100 ppm
- Iron (Fe) max. 5 ppm

Quantity	Packaging Material	Art. no.
11 kg	Plastic canister	1376.9010

SODIUM HYDROXIDE SOLUTION 20 % PURE (19.5 – 20.5 %)

- Density (20 °C) 1.213 – 1.225 g/ml

Specification

- Assay (alkalimetric) 19.5 – 20.5 %
- Carbonate (CO_3) max. 1.0 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1315.1000

SODIUM HYDROXIDE SOLUTION 25 % W/W P. A. (24.8 – 25.2 %)

- 320 g NaOH/l H_2O
- Density (20 °C) 1.272 – 1.276 g/ml

Quantity	Packaging Material	Art. no.
25 l	Plastic canister	1391.9025

SODIUM HYDROXIDE SOLUTION 32 % W/W PURISS.

- 432 g NaOH/l H_2O
- Density 1.349 g/ml

Specification

- Melting point 9 °C
- Sodium carbonate (Na_2CO_3) max. 1.0 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1381.2511

SODIUM HYDROXIDE SOLUTION 32 % W/W P. A.

- 432 g NaOH/l H_2O
- Density 1.349 g/ml

Specification

- Melting point 9 °C
- Sodium carbonate (Na_2CO_3) max. 0.1 %
- Iron (Fe) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.01 %
- Nitrogen (N) max. 0.0001 %
- Sulphate (SO_4) max. 0.005 %
- Sulphur (S) max. 0.0015 %
- Suitable for the nitrogen determination acc. to Kjeldahl

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	1304.2511
5 l	Plastic canister	1304.5000
10 l	Plastic canister	1304.9010
20 l	Plastic canister	1304.9020
25 l	Plastic canister	1304.9025
1.000 l	IBC	1304.9800









Volumetric solutions → page 185–193, 195

SODIUM HYPOCHLORITE SOLUTION

- M = 74.44 g/mol
- CAS-No. 7681-52-9
- EC Index No. 017-011-00-1
- EC-No. 231-668-3
- Density 1.22 g/ml
- UN-No. 1791
- ADR 8, II

GHS

- H314 H400 H411 EUH031
- P260 P264 P273 P280 P301+P330+P331 P303+P361+P353 P304+P340 P310 P305+P351+P338 P321 P363 P391 P405 P501

Danger



Specification

- Yellowish liquid
- Melting point 0 °C
- Boiling point 100 °C

SODIUM HYPOCHLORITE SOLUTION 47/50 %

Specification

- Assay (active chlorine at production) 12,5 – 13,5 %
- Storage at 2 – 15 °C

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1305.1000
2.5 l	Plastic bottle	1305.2500

SODIUM IODIDE

- NaI
- M = 149.89 g/mol
- CAS-No. 7681-82-5
- EC-No. 231-679-3
- Density 3.67 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H372 H400
- P260 P273 P314 P501

Danger



Specification

- Colourless to white solid
- Melting point 662 °C
- Boiling point 1304 °C

SODIUM IODIDE PURISS., DAB, PH. EUR., BP, PH. FRANÇ., USP (99.0 – 100.5 %)

Specification

- Loss on drying max. 1 %
- Free alkali max. 0.01 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.05 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.03 %
- Iodate (IO_3) max. 0.0002 %
- Sulphate (SO_4) max. 0.01 %
- Thiosulphate (S_2O_3) max. 0.005 %
- Nitrogen (N) max. 0.003 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1354.1000
25 kg	Fibre drum	1354.9025

SODIUM MOLYBDATE DIHYDRATE

- M = 241.95 g/mol
- Density 3.28 g/ml

Specification

- Colourless to white solid

SODIUM MOLYBDATE DIHYDRATE P. A., PH. EUR., ACS (MIN. 99.5 %)

- Na_2MoO_4 x 2 H_2O
- CAS-No. 10102-40-6
- EC-No. 231-551-7

Specification

- Ammonium (NH_4) max. 0.001 %
- Iron (Fe) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.005 %
- pH (5 %, 25 °C) 7.0 – 10.5
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.0005 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1377.0100
1 kg	Plastic bottle	1377.1000

SODIUM NITRATE

- $NaNO_3$
- M = 84.99 g/mol
- CAS-No. 7631-99-4
- EC-No. 231-554-3
- Density 2.26 g/ml
- UN-No. 1498
- ADR 5.1, III

GHS
- H272 H319
- P210 P220 P221 P280 P305+P351+P338 P501



Specification
- White crystals

SODIUM NITRATE P. A., ACS, PH. EUR., ISO (MIN. 99.5 %)

Specification
- Insoluble matter max. 0.005 %
- Chloride (Cl) max. 0.0005 %
- Iodate (IO_3) max. 0.0005 %
- Sulphate (SO_4) max. 0.003 %
- Heavy metals (as Pb) max. 0.0005 %
- Calcium (Ca) max. 0.002 %
- Iron (Fe) max. 0.0002 %
- Magnesium (Mg) max. 0.001 %
- pH (5 %, 25 °C) 5.5 – 8.3
- Phosphate (PO_4) max. 0.0002 %
- Nitrite (NO_2) max. 0.001 %
- Ammonium (NH_4) max. 0.002 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Potassium (K) max. 0.005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.0005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1309.0500
1 kg	Plastic bottle	1309.1000
25 kg	Fibre drum	1309.9025

SODIUM NITRITE

- $NaNO_2$
- M = 69.00 g/mol
- CAS-No. 7632-00-0
- EC Index No. 007-010-00-4
- EC-No. 231-555-9
- Density 2.1 g/ml
- UN-No. 1500
- ADR 5.1 (6.1), III

GHS
- H272 H301 H400
- P273 P501



Specification
- Colourless to light yellow solid
- Melting point 280 °C
- Boiling point 320 °C

SODIUM NITRITE PURE (MIN. 98.0 %)

Specification
- Heavy metals (as Pb) max. 0.005 %
- Chloride (Cl) max. 0.02 %
- Sulphate (SO_4) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1342.1000

SODIUM NITRITE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification
- Calcium (Ca) max. 0.002 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.005 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	1359.0100
500 g	Plastic bottle	1359.0500

SODIUM NITROPRUSSIDE DIHYDRATE

- $Na_2[Fe(CN)_5NO]$ x 2 H_2O
- M = 297.95 g/mol
- CAS-No. 13755-38-9
- EC-No. 238-373-9
- Density 1.71 g/ml
- UN-No. 1588
- ADR 6.1, II

GHS
- H301
- P308+P311 P405 P501

Danger



Specification
- Red solid

SODIUM NITROPRUSSIDE DIHYDRATE (SODIUM PENTACYANONITROSOFERRAT(III) DIHYDRATE) P. A.

Specification
- Insoluble matter max. 0.01 %
- Chloride (Cl) max. 0.02 %
- Sulphate (SO_4) max. 0.01 %
- Potassium hexacyanoferrate(II) ($K_4[Fe(CN)_6]$) max. 0.02 %
- Potassium hexacyanoferrate(III) ($K_3[Fe(CN)_6]$) max. 0.01 %

Quantity	Packaging Material	Art. no.
25 g	Glass bottle	1389.0025
100 g	Glass bottle	1389.0100

SODIUM PEROXODISULPHATE

- $Na_2S_2O_8$
- M = 238.1 g/mol
- CAS-No. 7775-27-1
- EC-No. 231-892-1
- Density 1.15 g/ml
- UN-No. 1505
- ADR 5.1 (6.1), III

GHS
- H272 H302 H315 H317 H319 H334 H335
- P280 P302+P352 P304+P341 P305+P351+P338 P342+P311 P501

Danger



Specification
- Colourless to white solid
- Melting point 100 °C (decomposition)

SODIUM PEROXODISULPHATE P. A., ACS, ISO (MIN. 99.0 %)

Specification
- Aluminium (Al) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Heavy metals (as Pb) max. 0.002 %
- Chloride (Cl) max. 0.002 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.001 %
- Nitrogen (N) max. 0.003 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1383.1000

TRI-SODIUM PHOSPHATE DODECAHYDRATE

- Na_3PO_4 x 12 H_2O
- M = 380.18 g/mol
- CAS-No. 10101-89-0
- EC-No. 231-509-8
- Density (20 °C) 1.62 g/ml

GHS
- H315 H319
- P302+P352 P305+P351+P338 P501

Warning



Specification
- Colourless solid
- Melting point 75 °C

TRI-SODIUM PHOSPHATE DODECAHYDRATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification
- Free alkali max. 2.5 %
- Chloride (Cl) max. 0.0005 %
- Iron (Fe) max. 0.001 %
- Heavy metals (as Pb) max. 0.001 %
- Nitrogen (N) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Fluoride (F) max. 0.005 %
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1348.1000
5 kg	Plastic bottle	1348.5000

SODIUM PYROPHOSPHATE DECAHYDRATE

- $Na_4P_2O_7$ x 10 H_2O
- M = 446.06 g/mol
- CAS-No. 13472-36-1
- EC-No. 231-767-1
- Density 1.820 g/ml

GHS
- H315 H319 H335
- P260 P280 P305+P351+P338 P337+P313 P362+P364 P501



Specification
- White solid
- Melting point 79.5 °C

SODIUM PYROPHOSPHATE DECAHYDRATE P. A., ACS, PH. EUR. (MIN. 99.0 %)

Specification
- Potassium (K) max. 0.005 %
- Insoluble matter max. 0.01 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.1 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- pH (5 %, 25 °C) 9.5 – 10.5

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1382.0500
2.5 kg	Plastic bottle	1382.2500

SODIUM SALICYLATE

- $C_7H_5NaO_3$
- M = 160.11 g/mol
- CAS-No. 54-21-7
- EC-No. 200-198-0
- Density 0.32 g/ml

GHS
- H302 H319
- P260 P305+P351+P338



Specification
- Colourless solid
- Melting point 200 °C

SODIUM SALICYLATE P. A., PH. EUR. (MIN. 99.5 %)

Specification
- Loss on drying max. 0.3 %
- Iron (Fe) max. 0.001 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.002 %
- Sulphate (SO_4) max. 0.01 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1394.0250
1 kg	Plastic bottle	1394.1000

SODIUM SULPHATE

- Na_2SO_4
- M = 142.04 g/mol
- CAS-No. 7757-82-6
- EC-No. 231-820-9
- Density 2.70 g/ml

Specification
- White, crystalline substance
- Melting point 884 °C

SODIUM SULPHATE ANHYDROUS P. A., ACS (GRANULES) (MIN. 99.0 %)

Specification
- Assay (acidimetric) min. 99.0 %
- pH (5 %, 25 °C) 5.2 – 9.2
- Loss on ignition max. 0.5 %
- Insoluble matter in water max. 0.01 %
- Total nitrogen (N) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Calcium (Ca) max. 0.01 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1327.1000
5 kg	Plastic bucket	1327.5000

SODIUM SULPHATE ANHYDROUS P. A., ACS (POWDER) (MIN. 99.0 %)

Specification

- Assay (acidimetric) min. 99.0 %
- pH (5 %, 25 °C) 5.2 – 9.2
- Loss on ignition max. 0.5 %
- Insoluble matter in water max. 0.01 %
- Total nitrogen (N) max. 0.0005 %
- Chloride (Cl) max. 0.001 %
- Phosphate (PO_4) max. 0.001 %
- Heavy metals (as Pb) max. 0.0005 %
- Calcium (Ca) max. 0.01 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.01 %
- Magnesium (Mg) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1337.1000

SODIUM SULPHATE ANHYDROUS PURISS. (MIN. 99.0 %)

Specification

- Assay 99.0 – 100.5 %
- Loss on ignition max. 0.5 %
- Free acid max. 0.05 %
- Free alkali max. 0.04 %
- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Zinc (Zn) max. 0.01 %
- Heavy metals (as Pb) max. 0.001 %
- Chloride (Cl) max. 0.02 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	6396.1000
2.5 kg	Plastic bottle	6396.2500
5 kg	Plastic bottle	6396.5000

SODIUM SULPHATE DECAHYDRATE

- $Na_2SO_4 \times 10\ H_2O$
- M = 322.19 g/mol
- CAS-No. 7727-73-3
- EC-No. 231-820-9
- Density 1.464 g/ml

Specification

- Colourless solid
- Melting point 32 °C

SODIUM SULPHATE DECAHYDRATE P. A., ACS (MIN. 99.0 %)

Specification

- Arsenic (As) max. 0.0005 %
- Calcium (Ca) max. 0.002 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.002 %
- Magnesium (Mg) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Nitrogen (N) max. 0.0005 %
- pH (5 %, 25 °C) 5.2 – 9.2
- Insoluble matter max. 0.01 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1384.1000
5 kg	Plastic bottle	1384.5000

SODIUM SULFITE ANYHDROUS

- Na_2SO_3
- M = 126.04 g/mol
- CAS-No. 7757-83-7
- EC-No. 231-821-4
- Density 2.63 g/ml

Specification

- Colourless to white solid
- Melting point >500 °C

SODIUM SULFITE ANYHDROUS P. A., PH. EUR. (MIN. 98.0 %)

Specification

- Arsenic (As) max. 0.00002 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Zinc (Zn) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Thiosulphate (S_2O_3) max. 0.02 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1385.0500
1 kg	Plastic bottle	1385.1000
10 kg	Plastic bucket	1385.9010

DI-SODIUM TARTRATE DIHYDRATE

- $Na_2C_4H_4O_6 \times 2\ H_2O$
- M = 230.08 g/mol
- CAS-No. 6106-24-7
- EC-No. 212-773-3
- Density 1.82 g/ml

Specification

- Colourless solid
- Melting point 57 °C

DI-SODIUM TARTRATE DIHYDRATE P. A., ACS (MIN. 99.5 %)

Specification

- Loss on drying 15.61 – 15.71 %
- Ammonium (NH_4) max. 0.001 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.0005 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.0005 %
- Sulphate (SO_4) max. 0.002 %
- pH (5 %, 25 °C) 7.0 – 9.0
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	1353.1000

DI-SODIUM TETRABORATE DECAHYDRATE

- $Na_2B_4O_7 \times 10\ H_2O$
- M = 381.37 g/mol
- CAS-No. 1303-96-4
- EC Index No. 005-011-01-1
- EC-No. 215-540-4
- Density 1.72 g/ml

GHS

- H360FD
- P201 P202 P280 P308+P313 P405 P501



Specification

- White, crystalline powder
- Melting point ~75 °C

DI-SODIUM TETRABORATE DECAHYDRATE P. A., ACS (MIN. 99.5 %)

Specification

- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Phosphate (PO_4) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- pH (0.01 M, 25 °C) 9.15 – 9.20
- Insoluble matter max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8614.0500
25 kg	Plastic drum	8614.9025

SODIUM THIOSULPHATE

- $Na_2S_2O_3$
- M = 158.11 g/mol
- CAS-No. 7772-98-7
- EC-No. 231-867-5
- Density 1.67 g/ml

Specification

- Colourless to white solid
- Melting point 48 °C
- Boiling point 100 °C (decomposition)

SODIUM THIOSULPHATE ANHYDROUS (MIN. 98.0 %)

Specification

- pH 6.0 – 8.5
- Sulphur (S) max. 0.002 %
- Heavy metals (as Pb) max. 0.005 %
- Iron (Fe) max. 0.005 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	1379.0250

Volumetric solutions → page 187–188, 195–196

SODIUM THIOSULPHATE PENTAHYDRATE

- $Na_2S_2O_3$ x 5 H_2O
- M = 248.21 g/mol
- CAS-No. 10102-17-7
- EC-No. 231-867-5
- Density 1.74 g/ml

Specification

- Colourless to white solid
- Melting point 48 °C

SODIUM THIOSULPHATE PENTAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Calcium (Ca) max. 0.002 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Magnesium (Mg) max. 0.001 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.01 %
- Sulphate (SO_4) max. 0.1 %
- Sulphur (S) max. 0.0001 %
- Nitrogen (N) max. 0.002 %
- pH (5 %, 25 °C) 5.5 – 7.5
- Insoluble matter max. 0.005 %

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	1388.0500
1 kg	Plastic bottle	1388.1000

SULPHURIC ACID

SULPHURIC ACID 62 % W/W

- 942 g H_2SO_4/l H_2O
- Density 1.52 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501



Specification

- Colourless liquid

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	831.2500

SULPHURIC ACID 72 % W/W

- 1176 g H_2SO_4/l H_2O
- Density 1.634 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501



Specification

- Colourless liquid

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	849.1000

SULPHURIC ACID TECHNICAL GRADE 96 % (MIN. 95.0 %)

- H_2SO_4
- CAS-No. 7664-93-9
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501



Specification

- Clear to light turbid liquid
- Iron (Fe) max. 100 ppm
- Sulphur dioxide (SO_2) max. 100 ppm

Quantity	Packaging Material	Art. no.
70 kg	Plastic canister	898.9070

SULPHURIC ACID PURISS., FCC (MIN. 95.0 %)

- H_2SO_4
- CAS-No. 7664-93-9
- Density 1.84 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501

Danger 

Specification

- Colourless liquid
- Boiling point 330 °C
- Assay 95.0 – 97.0 %
- Residue on ignition max. 0.0002 %
- Arsenic (As) max. 0.00001 %
- Iron (Fe) max. 0.0002 %
- Heavy metals (as Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0001 %
- Nitrate (NO_3) max. 0.0005 %
- Reducing substances max. 0.0002 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	874.1000
2.5 l	Plastic bottle	874.2500
5 l	Plastic bottle	874.5000
25 l	Plastic canister	874.9025

SULPHURIC ACID P. A., FCC (MIN. 25.0 % W/W)

- 295 g H_2SO_4/l H_2O
- Density 1.18 g/ml
- UN-No. 2796
- ADR 8, II

GHS

- H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P231 P363 P405 P501

Danger 

Specification

- Colourless liquid
- Boiling point ~103 °C

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	884.1011

SULPHURIC ACID P. A. (MIN. 95.0 %)

- H_2SO_4
- CAS-No. 7664-93-9
- Density 1.84 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501

Danger 

Specification

- Colourless liquid
- Melting point -15 °C
- Boiling point 330 °C
- Chloride (Cl) max. 0.000005 %
- Nitrate (NO_3) max. 0.00002 %
- Reducing substances max. 0.0002 %
- Residue on ignition max. 0.0005%
- Ammonium (NH_4) max. 0.0001 %
- Arsenic (As) max. 0.000003 %
- Selenium (Se) max. 0.0003 %
- Cadmium (Cd) max. 0.00001 %
- Copper (Cu) max. 0.00001 %
- Iron (Fe) max. 0.00002 %
- Lead (Pb) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	859.1000
2.5 l	Glass bottle	859.2500

SULPHURIC ACID P. A. (MIN. 97.0 %)

- H_2SO_4
- CAS-No. 7664-93-9
- Density 1.84 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501



Specification

- Colourless liquid
- Melting point ~3 °C
- Boiling point ~335 °C
- Residue on ignition max. 2 ppm
- Nitrogen (N) max. 1 ppm
- Suitable for the nitrogen determination acc. to Kjeldahl

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	822.2500

SULPHURIC ACID SUPERPURE FOR TRACE ANALYSIS (93.0 – 98.0 % W/W)

- H_2SO_4
- CAS-No. 7664-93-9
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501



Specification

- Colourless liquid
- Colour (APHA) max. 10
- Chloride (Cl) max. 0.7 ppm
- Nitrate (NO_3) max. 0.2 ppm
- Total phosphorus (P) max. 0.05 ppm
- Substances reducing $KMnO_4$ max. 20 ppm
- Aluminium (Al) max. 1 ppb
- Antimony (Sb) max. 1 ppb
- Arsenic (As) max. 0.5 ppb
- Barium (Ba) max. 0.1 ppb
- Beryllium (Be) max. 0.1 ppb
- Bismuth (Bi) max. 0.1 ppb
- Cadmium (Cd) max. 0.5 ppb
- Calcium (Ca) max. 1 ppb
- Cerium (Ce) max. 0.1 ppb
- Caesium (Cs) max. 0.1 ppb
- Chromium (Cr) max. 0.5 ppb
- Cobalt (Co) max. 0.5 ppb
- Copper (Cu) max. 0.5 ppb
- Dysprosium (Dy) max. 0.1 ppb
- Erbium (Er) max. 0.1 ppb
- Europium (Eu) max. 0.1 ppb
- Gadolinium (Gd) max. 0.1 ppb
- Gallium (Ga) max. 0.1 ppb
- Germanium (Ge) max. 1 ppb
- Gold (Au) max. 0.5 ppb
- Hafnium (Hf) max. 0.1 ppb
- Holmium (Ho) max. 0.1 ppb
- Indium (In) max. 0.1 ppb
- Iron (Fe) max. 1 ppb
- Lanthanum (La) max. 0.1 ppb
- Lead (Pb) max. 0.1 ppb
- Lithium (Li) max. 0.5 ppb
- Magnesium (Mg) max. 1 ppb
- Manganese (Mn) max. 0.5 ppb
- Mercury (Hg) max. 0.1 ppb
- Molybdenum (Mo) max. 0.5 ppb
- Neodymium (Nd) max. 0.1 ppb
- Nickel (Ni) max. 0.5 ppb
- Niobium (Nb) max. 0.1 ppb
- Potassium (K) max. 1 ppb
- Praseodymium (Pr) max. 0.1 ppb
- Rhenium (Re) max. 0.5 ppb
- Rhodium (Rh) max. 0.5 ppb
- Rubidium (Rb) max. 0.5 ppb
- Samarium (Sm) max. 0.1 ppb
- Scandium (Sc) max. 0.1 ppb
- Selenium (Se) max. 10 ppb
- Silver (Ag) max. 1 ppb
- Sodium (Na) max. 1 ppb
- Strontium (Sr) max. 0.5 ppb
- Tellurium (Te) max. 0.1 ppb
- Terbium (Tb) max. 0.1 ppb
- Thallium (Tl) max. 0.1 ppb
- Thorium (Th) max. 0.1 ppb
- Thulium (Tm) max. 0.1 ppb
- Tin (Sn) max. 1 ppb
- Titanium (Ti) max. 1 ppb
- Tungsten (W) max. 0.5 ppb
- Uranium (U) max. 0.1 ppb
- Vanadium (V) max. 0.5 ppb
- Ytterbium (Yb) max. 0.1 ppb
- Yttrium (Y) max. 0.1 ppb
- Zinc (Zn) max. 1 ppb
- Zirconium (Zr) max. 0.5 ppb

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	863.1011

Volumetric solutions → page 196

SULPHURIC ACID VLSI PPB GRADE (95.0 – 98.0 % W/W)

- H_2SO_4
- CAS Nr. 7664-93-9
- Density 1.84 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501

Danger 

Specification

- Clear liquid
- Melting point 10 °C
- Boiling point 290 °C
- Colour (APHA) max. 10
- Residue on ignition max. 0.0003 %
- Chloride (Cl) max. 0.00001 %
- Nitrate (NO_3) max. 0.00002 %
- Phosphate (PO_4) max. 0.00003 %
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 50 ppb
- Arsenic (As) max. 10 ppb
- Gold (Au) max. 10 ppb
- Boron (B) max. 20 ppb
- Barium (Ba) max. 10 ppb
- Beryllium (Be) max. 10 ppb
- Bismuth (Bi) max. 20 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 50 ppb
- Gallium (Ga) max. 10 ppb
- Germanium (Ge) max. 10 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 10 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 10 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max.10 ppb
- Antimony (Sb) max. 10 ppb
- Silicon (Si) max. 30 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 20 ppb
- Titanium (Ti) max. 20 ppb
- Thallium (Tl) max. 20 ppb
- Vanadium (V) max. 10 ppb
- Zinc (Zn) max. 20 ppb
- Zirconium (Zr) max. 10 ppb
- Particle count > 0.5 µm max. 80 P/ml
- Particle count > 1.0 µm max. 10 P/ml
- Filtered through 0.2 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	829.2500

SULFURIC ACID VLSI 96% PPM GRADE (95 – 97 % W/W)

- H_2SO_4
- CAS Nr. 7664-93-9
- Density 1.84 g/ml
- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P390 P405 P501

Danger 

Specification

- Clear liquid
- Melting point 10 °C
- Boiling point 290 °C
- substances reducing $KMNO_4$ max. 1 ppm
- Ammonia max. 2 ppm
- Colour (APHA) max. 10
- Residues max. 3 ppm
- Chloride (Cl) max. 0.1 ppm
- Nitrate (NO_3) max. 0.2 ppm
- Phosphate (PO_4) max. 0.5 ppm
- Silver (Ag) max. 10 ppb
- Aluminium (Al) max. 50 ppb
- Arsenic (As) max. 10 ppb
- Gold (Au) max. 10 ppb
- Boron (B) max. 20 ppb
- Barium (Ba) max. 10 ppb
- Beryllium (Be) max. 10 ppb
- Bismuth (Bi) max. 20 ppb
- Calcium (Ca) max. 50 ppb
- Cadmium (Cd) max. 10 ppb
- Cobalt (Co) max. 10 ppb
- Chromium (Cr) max. 10 ppb
- Copper (Cu) max. 10 ppb
- Iron (Fe) max. 50 ppb
- Gallium (Ga) max. 10 ppb
- Potassium (K) max. 50 ppb
- Lithium (Li) max. 10 ppb
- Magnesium (Mg) max. 20 ppb
- Manganese (Mn) max. 10 ppb
- Sodium (Na) max. 50 ppb
- Nickel (Ni) max. 10 ppb
- Lead (Pb) max.10 ppb
- Antimony (Sb) max. 10 ppb
- Tin (Sn) max. 20 ppb
- Strontium (Sr) max. 20 ppb
- Vanadium (V) max. 10 ppb
- Zinc (Zn) max. 20 ppb
- Zirkonium (Zr) max. 10 ppb
- Particle controll > 0.5 µm max. 250 P/ml
- Filtered through 0.2 µm
- Filled under Inertgas

Quantity	Packaging Material	Art. no.
2.5 l	Plastic bottle	6900.2511

Test strips, semi-quantative → see page 218 – 219

TETRACHLOROETHYLENE

- C_2Cl_4
- M = 165.83 g/mol
- CAS-No. 127-18-4
- EC Index No. 602-028-00-4
- EC-No. 204-825-9
- Density 1.623 g/ml
- UN-No. 1897
- ADR 6.1, III

GHS

- H315 H317 H319 H336 H351 H411
- P261 P271 P280 P303+P361+P353 P304+P340 P305+P351+P338 P403+P233 P501



Specification

- Colourless liquid
- Melting point -22 °C
- Boiling point 121.1 °C

TETRACHLOROETHYLENE PURISS. (MIN. 99.0 %)

Specification

- Identity (IR) complies
- Water max. 0.01 %
- Acidity max. 0.0005 meq/g
- Non-volatile substances max. 0.0005 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	710.2500

TETRAHYDROFURAN

- C_4H_8O
- M = 72.11 g/mol
- CAS-No. 109-99-9
- EC Index No. 603-025-00-0
- EC-No. 203-726-8
- UN-No. 2056
- ADR 3, II

GHS

- H225 H319 H335 H351 EUH019
- P201 P210 P241 P243 P261 P280 P303+P361+P353 P304+P340 P305+P351+P338 P308+P313 P403+P233 P501



Specification

- Clear, colourless liquid
- Melting point -108 °C
- Boiling point 64 – 66 °C

TETRAHYDROFURAN PURISS. (MIN. 99.9 % (STAB.))

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.405 – 1.409
- Water (KF) max. 200 mg/kg
- Free acids (as CH_3COOH) max. 50 mg/kg
- Peroxides (as H_2O_2) max. 100 mg/kg
- Colour (Hazen) max. 10
- Density (d 20/4) 0.884 – 0.894
- Stabilized with ionol 200 – 400 mg/kg

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	741.2500
25 l	Metal drum	741.9025

TETRAHYDROFURAN P. A., ACS, PH. EUR. (MIN. 99.9 % (STAB.))

- Density 0.89 g/ml

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.05 %
- Free acid max. 0.001 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000002 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.00005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Hydrogen peroxide (H_2O_2) max. 0.005 %
- Colour (APHA) max. 20
- Residue on evaporation max. 0.03 %
- Stabilized with BHT max. 250 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	728.1000
2.5 l	Glass bottle	728.2500

TETRAHYDROFURAN ANHYDROUS P. A. (MIN. 99.9 % (STAB.))

Specification

- Identity (IR) complies
- Refractive index (20 °C) 1.405 – 1.409
- Water (KF) max. 100 mg/kg
- Colour (Hazen) max. 10
- Free acids (as CH_3COOH) max. 20 mg/kg
- Peroxides (as H_2O_2) max. 20 mg/kg
- Density (d20/4) 0.884 – 0.894
- Stabilized with ionol 200 – 400 mg/kg

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	775.1000

TETRAHYDROFURAN FOR HPLC (MIN. 99.9 % (UNSTAB.))

Specification

- Refractive index (20 °C) 1.405 – 1.409
- Water (KF) max. 200 mg/kg
- Non-volatile substances max. 5 mg/kg
- Free acids (as CH_3COOH) max. 20 mg/kg
- Peroxides (as H_2O_2) max. 300 mg/kg
- UV transmittance at 240 nm min. 20.0 %
- UV transmittance at 250 nm min. 45.0 %
- UV transmittance at 300 nm min. 90.0 %
- UV transmittance at 320 nm min. 95.0 %
- Colour (Hazen) max. 10
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	797.1000
2.5 l	Glass bottle	797.2500

TETRAHYDROFURAN FOR HPLC (MIN. 99.9 % (UNSTAB.))

Specification

- Identity (IR) complies
- Non-volatile substances max. 0.0005 %
- Water (KF) max. 0.05 %
- Free acid (as CH_3COOH) max. 0.002 %
- Peroxides (as H_2O_2) max. 0.05 %
- Colour (APHA) max. 10
- Absorbance at 400 nm max. 0.005
- Absorbance at 350 nm max. 0.005
- Absorbance at 315 nm max. 0.0044
- Absorbance at 300 nm max. 0.02
- Absorbance at 275 nm max. 0.046
- Absorbance at 250 nm max. 0.18
- Absorbance at 245 nm max. 0.26
- Absorbance at 212 nm max. 1,0
- Filtered through 0.2 µm
- Inhibitor free

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	774.1000
2.5 l	Glass bottle	774.2500

TIN(II) CHLORIDE DIHYDRATE

- $SnCl_2 \times 2\ H_2O$
- M = 225.63 g/mol
- CAS-No. 10025-69-1
- EC-No. 231-868-0
- Density 2.71 g/ml
- UN-No. 3260
- ADR 8, III

GHS

- H302 H314
- P280 P305+P351+P338 P501



Specification

- Colourless solid
- Melting point 38 °C
- Boiling point 652 °C (anhydrous)

TIN(II) CHLORIDE DIHYDRATE P. A. (MIN. 98.0 %)

Specification

- Insoluble matter max. 0.005 %
- Ammonium (NH_4) max. 0.002 %
- Arsenic (As) max. 0.0001 %
- Calcium (Ca) max. 0.005 %
- Copper (Cu) max. 0.001 %
- Iron (Fe) max. 0.002 %
- Mercury (Hg) max. 0.000001 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Manganese (Mn) max. 0.0005 %
- Sodium (Na) max. 0.005 %
- Nickel (Ni) max. 0.0005 %
- Lead (Pb) max. 0.005 %
- Sulphate (SO_4) max. 0.002 %
- Suitable for AAS

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	133.0100
250 g	Plastic bottle	133.0250

TISAB SOLUTIONS FOR FLUORIDE DETERMINATION

TISAB I SOLUTION FOR FLUORIDE DETERMINATION

GHS
- H314
- P280 P303+P361+P353 P305+P351+P338 P403+P233 P501

Danger



Specification
- pH (20 °C) 5.3 – 5.5

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	740.0500

TISAB III SOLUTION FOR FLUORIDE DETERMINATION

GHS
- H319
- P280 P305+P351+P338 P337+P313 P501

Warning



Specification
- pH (20 °C) 5.0 – 5.5

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	743.0500

TOLUENE

- $C_6H_5CH_3$
- M = 92.14 g/mol
- CAS-No. 108-88-3
- EC Index No. 601-021-00-3
- EC-No. 203-625-9
- Density (20 °C) 0.862 – 0.872 g/ml
- UN-No. 1294
- ADR 3, II

GHS
- H225 H304 H315 H336 H361d H373
- P210 P243 P260 P301+P310 P303+P361+P353 P304+P340 P331 P403+P233 P501

Danger



Specification
- Clear, colourless liquid
- Melting point -95 °C
- Boiling point 109.9 – 111.4 °C

TOLUENE FOR SYNTHESIS (MIN. 99.5 %)

Specification
- Identity complies
- Refractive index (20 °C) 1.491 – 1.501
- Residue on evapoartion max. 50 ppm
- Water (KF) max. 300 ppm
- Benzene (C_6H_6) max. 0.02 %
- Total sulphur (S) max. 100 ppm
- Ethyl benzene and xylene max. 750 ppm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	704.2500

TOLUENE PURISS. (MIN. 99.7 %)

Specification
- Non-volatile substances max. 0.001 %
- Water max. 0.05 %
- Thiophene (C_4H_4S) max. 0.0005 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	733.2500

TOLUENE P. A., ACS, ISO, PH. EUR. (MIN. 99.9 %)

Specification

- Non-volatile substances max. 0.001 %
- Water max. 0.02 %
- Free acid max. 0.001 %
- Free alkali max. 0.001 %
- Aluminium (Al) max. 0.00005 %
- Boron (B) max. 0.000001 %
- Barium (Ba) max. 0.00001 %
- Calcium (Ca) max. 0.00005 %
- Cadmium (Cd) max. 0.000005 %
- Cobalt (Co) max. 0.000002 %
- Chromium (Cr) max. 0.000002 %
- Copper (Cu) max. 0.000002 %
- Iron (Fe) max. 0.00001 %
- Magnesium (Mg) max. 0.00001 %
- Manganese (Mn) max. 0.000002 %
- Nickel (Ni) max. 0.000002 %
- Lead (Pb) max. 0.00001 %
- Tin (Sn) max. 0.00001 %
- Zinc (Zn) max. 0.00001 %
- Sulphur (S) max. 0.003 %
- Thiophene (C_4H_4S) max. 0.0001 %
- Residue on evaporation max. 0.001 %
- Readily carbonizable substances complies
- Colour (APHA) max. 10
- Substances darkened by H_2SO_4 complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	752.1000
2.5 l	Glass bottle	752.2500
25 l	Plastic canister	752.8025
25 l	Metal drum	752.9025
200 l	Metal drum	752.9200

TOLUENE FOR RESIDUE ANALYSIS (MIN. 99.8 %)

Specification

- Colour (Hazen) max. 10
- Refractive index (20 °C) 1.494 – 1.498
- Non-volatile substances max. 5 mg/kg
- Water (KF) max. 100 mg/kg
- Free acids (as HCl) max. 10 mg/kg
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	715.2500

TOLUENE FOR PESTICIDE ANALYSIS (MIN. 99.8 %)

Specification

- Identity complies
- Colour (Hazen) max. 10
- Non-volatile substances max. 5 ppm
- Water max. 100 ppm
- Aciditity (HCl) max. 10 ppm
- GC-ECD: Peak (lindane) (Retention range 1.2.4-trichlorobenzene to decachlorobiphenyl) max. 3 ng/l
- GC-NPD: Peak (ethylparathion) (Retention range atrazin to coumaphos) max. 3 ng/l
- GC-ECD: Peak (CCl4) (Retention range dichlorobenzene to 1.2.4-trichlorobenzene) max. 3 ng/l

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	739.2500

TOLUENE FOR HPLC (MIN. 99.8 %)

Specification

- Identity complies
- Refractive index (20 °C) 1.4931 – 1.4991
- Acidity or alkalinity max. 0.0015 meq/g
- Water (KF) max. 100 ppm
- Residue on evaporation max. 2 ppm
- UV transmittance at 285 nm min. 10 %
- UV transmittance at 290 nm min. 80 %
- UV transmittance at 300 nm min. 80 %
- UV transmittance at 310 nm min. 90 %
- UV transmittance at 320 nm min. 94 %
- UV transmittance at 330 nm min. 96 %
- UV transmittance at 350 nm min. 99 %
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	707.2500

TOLUENE ACC. TO ASTM D2699/D2700 (MIN. 99.5 %)

Specification

- Water max. 200 ppm
- Peroxides max. 5 mg/kg

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	768.2500

TRIETHYLAMINE

- $C_6H_{15}N$
- M = 101.19 g/mol
- CAS-No. 121-44-8
- EC Index No. 612-004-00-5
- EC-No. 204-469-4
- Density 0.73 g/ml
- UN-No. 1296
- ADR 3 (8), II

GHS

- H225 H302+H312+H332 H314 H335
- P210 P260 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P308+P311 P501



Specification

- Colourless liquid
- Melting point – 115 °C
- Boiling point 90 °C

TRIETHYLAMINE PURISS. (MIN. 99.0 %)

Specification

- pH (100 g/l H_2O) 12.7
- Water max. 0.1 %
- Diethylamine ($C_4H_{11}N$) max. 0.1 %
- Ethanol (C_2H_5OH) max. 0.05 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	760.1000

TRIS

- $C_4H_{11}NO_3$
- M = 121.14 g/mol
- CAS-No. 77-86-1
- EC-No. 201-064-4
- Density 1.353 g/ml

Specification

- White, crystalline powder
- Melting point 168 – 173 °C

TRIS FOR MOLECULAR BIOLOGY (MIN. 99.9 %)

Specification

- pH (1 M H_2O, 20 °C) 10.5 – 11.5
- UV absorbance at 260 nm (40 % H_2O) max. 0.03
- UV absorbance at 280 nm (40 % H_2O) max. 0.02
- UV absorbance at 430 nm (40 % H_2O) max. 0.004 %
- Loss on drying (105 °C, 3 h) max. 0.2 %
- Copper (Cu) max. 0.0001 %
- Iron (Fe) max. 0.0001 %
- Lead (Pb) max. 0.0001 %
- DNase, RNase, Protease not detectable

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8085.0500
1 kg	Plastic bottle	8085.1000

TWEEN® 20

- $C_{58}H_{114}O_{26}$
- M = 1227.72 g/mol
- CAS-No. 9005-64-5
- Density (20 °C) 1.09 – 1.12 g/ml

Specification

- Pale yellow, viscous liquid
- Boiling point 100 °C

TWEEN® 20 FOR MOLECULAR BIOLOGY

Specification

- Heavy metals (as Pb) max. 0.001 %
- Water (KF) max. 3 % w/w
- Hydroxyl value 96 – 108 mg KOH/g
- Saponification value 40 – 50 mg KOH/g
- Acid max. 2.0 mg KOH/g
- pH (5 %) 5.0 – 7.0
- Residue on ignition max. 0.25 %
- DNase/RNase/Protease not detectable

Quantity	Packaging Material	Art. no.
500 ml	Glass bottle	8022.0500
1 l	Glass bottle	8022.1000

TWEEN® 20

Specification

- Saponification value 40 – 50 mg KOH/g
- Acid value ⩽ 2 mg KOH/g
- Hydroxyl value 96 – 108 mg KOH/g
- Iodine ⩽ 5 g I2/100g
- Dioxane ⩽ 5 ppm
- Ethylene oxide ⩽ 1 ppm

Quantity	Packaging Material	Art. no.
10 kg	Plastic canister	8020.9010
25 kg	Plastic canister	8020.9025

URANINE

- M = 376.27 g/mol
- CAS-No. 518-47-8
- EC Index No. 242-355-6
- EC-No. 208-253-0

Specification

- Orange-red-brown powder

URANINE (FLUORESCEIN-SODIUM) C.I. 45350

Specification

- Absorption maximum 490 – 494 nm
- Spec. Absorptivity (UV/VIS) 170.000 – 200.00 cm^2/mg
- UV/VIS-Spectrum complies

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	600.0100
1 kg	Plastic bottle	600.1000

WATER

- H_2O
- M = 18.02 g/mol
- CAS-No. 7732-18-5
- EC-No. 231-791-2
- Density 1.00 g/ml

Specification

- Clear, colourless liquid
- Melting point 0 °C
- Boiling point 100 °C

WATER, COMPARABLE TO BIDEST

Specification

- Produced by ion exchanger with downstream ultrapure water cartridge, UV torch and subsequent pressure filtration (0.2 µm)
- Conductivity during production max. 0.1 µS/cm
- Not tested for sterility

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	480.1000
5 l	Plastic canister	480.5000
10 l	Plastic canister	480.9010
20 l	Plastic canister	480.9020

WATER, DEIONISED

Specification

- Conductance (25 °C) 1 µS/cm
- pH 5.0 – 7.0
- Ammonium (NH_4) complies
- Calcium (Ca) complies
- Carbon dioxide (CO_2) complies
- Chloride (Cl) complies
- Sulphate (SO_4) complies
- Oxidizing substances complies
- Fluoride (F) max. 0.5 ppm
- Total organic carbon (TOC) max. 500 ppb
- Non-sterile

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	464.5000

WATER ULTRA PURE, AAS AND ICP, ASTM D-94, D-129

Specification

- Conductivity during production max. 1 µS/cm
- Non Volatiles max. 1 ppm
- Aluminium (Al) max. 0.002 ppm
- Chloride (Cl) max. 0.005 ppm
- Phosphate (PO_4) max. 0.01 ppm
- Nitrate (NO_3) max. 0.01 ppm
- Sulphate (SO_4) max. 0.1 ppm
- Silver (Ag) max. 0.0004 ppm
- Arsenic (As) max. 0.002 ppm
- Gold (Au) max. 0.001 ppm
- Boron (B) max. 0.005 ppm
- Barium (Ba) max. 0.001 ppm
- Beryllium (Be) max. 0.002 ppm
- Bismut (Bi) max. 0.001 ppm
- Calcium (Ca) max. 0.005 ppm
- Cadmium (Cd) max. 0.001 ppm
- Cobalt (Co) max. 0.001 ppm
- Chromium (Cr) max. 0.0004 ppm
- Copper (Cu) max. 0.0004 ppm
- Iron (Fe) max. 0.001 ppm
- Palladium (Pd) max. 0.008 ppm
- Potassium (K) max. 0.005 ppm
- Lithium (Li) max. 0.002 ppm
- Magnesium (Mg) max. 0.005 ppm
- Manganese (Mn) max. 0.0004 ppm
- Molybdenum (Mo) max. 0.002 ppm
- Sodium (Na) max. 0.01 ppm
- Nickel (Ni) max. 0.0004 ppm
- Lead (Pb) max. 0.001 ppm
- Platinium (Pt) max. 0.001 ppm
- Tin (Sn) max. 0.001 ppm
- Strontium (Sr) max. 0.0004 ppm
- Vanadium (V) max. 0.001 ppm
- Zinc (Zn) max. 0.004 ppm
- Zirkonium (Zr) max. 0.001 ppm
- Antimony (Sb) max. 0.001 ppm
- Selenium (Se) max. 0.0001 ppm
- Titanium (Ti) max. 0.001 ppm
- UV filtrated through 0.4 µm

Quantity	Packaging Material	Art. no.
5 l	Polytainer	405.5000

WATER P. A. (CONFORM TO EN ISO 3696)

Specification

- pH (25 °C) 5.0 – 7.0
- Conductivity (during production) max. 0.1 µS/cm
- Residue on evaporation max. 1 ppm
- Oxidizing substances (O) max. 0.4 mg/l
- Chloride (Cl) max. 0.1 ppm
- Phosphate (PO_4) max. 0.1 ppm
- Nitrate (NO_3) max. 0.1 ppm
- Sulphate (SO_4) max. 0.1 ppm
- Silver (Ag) max. 0.01 ppm
- Arsenic (As) max. 0.01 ppm
- Gold (Au) max. 0.01 ppm
- Boron (B) max. 0.01 ppm
- Barium (Ba) max. 0.01 ppm
- Beryllium (Be) max. 0.01 ppm
- Bismuth (Bi) max. 0.01 ppm
- Calcium (Ca) max. 0.01 ppm
- Cadmium (Cd) max. 0.01 ppm
- Cobalt (Co) max. 0.01 ppm
- Chromium (Cr) max. 0.01 ppm
- Copper (Cu) max. 0.01 ppm
- Iron (Fe) max. 0.01 ppm
- Indium (In) max. 0.01 ppm
- Potassium (K) max. 0.01 ppm
- Lithium (Li) max. 0.01 ppm
- Magnesium (Mg) max. 0.01 ppm
- Molybdenum (Mo) max. 0.01 ppm
- Sodium (Na) max. 0.1 ppm
- Nickel (Ni) max. 0.01 ppm
- Lead (Pb) max. 0.01 ppm
- Silicon (Si) max. 0.01 ppm
- Tin (Sn) max. 0.01 ppm
- Strontium (Sr) max. 0.01 ppm
- Vanadium (V) max. 0.01 ppm
- Zinc (Zn) max. 0.01 ppm
- Zirconium (Zr) max. 0.01 ppm
- Total organic carbon (TOC) max. 0.1 ppm

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	469.5000
10 l	Polytainer	469.9010

WATER ASTM TYPE 1, ACS

Specification

- Conductivity (25 °C) max. 0.0555 µS/cm
- Resistivity (25 °C) min. 18.0 MΩ·cm
- Total Organic Carbon (TOC) max. 50 µg/l
- Sodium (Na) max. 1 µg/l
- Chloride (Cl) max. 1 µg/l
- Silica (SiO_2) max. 3 µg/l
- Filtered through 0.1 µm
- Heavy metals (as Pb) max. 0.01 mg/l
- Nitrate (NO_3) max. 0.4 mg/l
- Phosphate (PO_4) max. 1 mg/l
- Sulphate (SO_4) max. 1 mg/l
- Oxidizing substances ($KMnO_4$) complies
- Manufactured by treating potable water using a combination of softening, prefiltration, carbon adsorption, reverse osmosis, mixed bed ion-exchange, UV-irradiation and ultra-filtration.

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	435.1000

WATER PURIFIED ACC. TO PH. EUR. 9.4

Specification

- Properties of the solution complies
- Appearance complies
- Purity complies
- Nitrate (NO_3) max. 0.2 ppm
- Conductivity max. 4.3 µS/cm
- Acidic/alkaline reacting substances complies
- Oxidizing substances complies
- Chloride (Cl) complies
- Sulphate (SO_4) complies
- Ammonium (NH_4) complies
- Calcium complies
- Magnesium complies
- Residue on evaporation max. 0.001 %
- Microbial impurities complies
- TAMC max. 200 KBE/ml
- BSE/TSE (CPMP/BWP/1230/98 REV 1) complies
- GMO (Regulation (EC) No. 1829/2003 and 1830/2003) complies
- Residual solvents (Guideline CPMP/ICH/235/95) complies
- Allergens (1223/2009/EG) complies
- Metal catalysts (EMEA/CHMP/SWP/4446/2000, ICH-Q3D) complies

Quantity	Packaging Material	Art. no.
10 l	Plastic canister	430.9010

WATER FOR HPLC

Specification

- Conductivity max. 0.1 µS/cm
- Resistivity min. 15 MΩcm
- HPLC gradient test complies
- HPLC gradient (peak) at 210 nm max. 5 mAU
- HPLC gradient (peak) at 254 nm max. 0.5 mAU
- Total organic carbon (TOC) max. 3 ppb
- Filtered through 0.1 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	418.1000
2.5 l	Glass bottle	418.2500

WATER FOR LC-MS

Specification

- HPLC gradient test complies
- HPLC gradient (peak) at 210 nm max. 5 mAU
- HPLC gradient (peak) at 254 nm max. 1 mAU
- Residue on evaporation max. 1 mg/kg
- Total organic carbon (TOC) max. 100 ppb
- Aluminium (Al) max. 0.000005 %
- Iron (Fe) max. 0.000005 %
- Calcium (Ca) max. 0.000005%
- Magnesium (Mg) max. 0.000005 %
- Sodium (Na) max. 0.00001 %
- Potassium (K) max. 0.000005 %
- Sensitive impurities (reserpine) max. 100 ppb
- Conductivity max. 0.1 µS/cm
- Filtered through 0.2 µm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	455.1000
2.5 l	Glass bottle	455.2500

WATER FOR UHPLC-MS

Specification

- Residue on evaporation max. 0.0001 % w/w
- LC-MS suitability test (reserpine) complies
- Fluorescence (as quinine) at 254 nm max. 0.30 ppb
- Fluorescence (as quinine) at 365 nm max. 0.30 ppb
- Gradient test at 210 nm max. 1 mAU
- Gradient test at 254 nm max. 0.5 mAU
- Total organic carbon (TOC) max. 10 ppb
- Acidity max. 0.00004 meq/g
- Alkalinity max. 0.00004 meq/g
- Aluminium (Al) max. 20 ppb
- Calcium (Ca) max. 50 ppb
- Iron (Fe) max. 20 ppb
- Potassium (K) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Sodium (Na) max. 100 ppb
- Lead (Pb) max. 20 ppb
- Resistance min. 18.2 MΩcm
- Filtered through 0.1 µm
- Filled under inert gas

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	470.1000
2.5 l	Glass bottle	470.2500

WATER FOR MOLECULAR BIOLOGY

Specification

- pH (25 °C) 5.0 – 7.0
- Osmolality 0 mOsm/kg
- Heavy metals (as Pb) max. 0.00001 %
- DNase/RNase/Protease not detectable
- Sterile

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	7711.0500
1 l	Plastic bottle	7711.1000

WATER WITH FORMIC ACID

Specification

- Clear, colourless liquid

WATER WITH 0.1 % V/V FORMIC ACID FOR LC-MS

Specification

- Colour (APHA) max. 10
- Acidity (as HCOOH) 0.095 – 0.105 %
- HPLC gradient (peak) at 210 nm max. 50 mAU
- HPLC gradient (peak) at 254 nm max. 10 mAU
- UV transmittance at 210 nm min. 5.0 %
- UV transmittance at 230 nm min. 45.0 %
- UV transmittance at 254 nm min. 99.0 %
- pH (20 °C) 2.6 – 2.8
- Sensitive impurities (reserpine) max. 50 ppb
- Aluminium (Al) max. 20 ppb
- Iron (Fe) max. 30 ppb
- Calcium (Ca) max. 50 ppb
- Magnesium (Mg) max. 20 ppb
- Sodium (Na) max. 100 ppb
- Potassium (K) max. 50 ppb

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	456.1000
2.5 l	Glass bottle	456.2500

XYLENE

- C_8H_{10}
- M = 106.17 g/mol
- CAS-No. 1330-20-7
- EC Index No. 601-022-00-9
- EC-No. 215-535-7
- Density (20 °C) 0.860 – 0.872 g/ml
- UN-No. 1307
- ADR 3, III

GHS

- H226 H312+H332 H315
- P210 P260 P280 P302+P352 P304+P340 P312 P403+P235 P501



Specification

- Clear, colourless liquid
- Boiling point 136.5 – 140.5 °C

XYLENE TECHNICAL GRADE, MIXTURE OF ISOMERS FOR HISTOLOGY

Specification

- Refractive index (20°C) 1.492-1.499
- Evaporation number (ether = 1) 15
- Kauri-butanol value 95
- Isomeric mixture of 1,2-, 1,3- and 1,4-dimethylbenzene and ethylbenzene

Quantity	Packaging Material	Art. no.
175 kg	Metal drum	370.90175
26 kg	Metal drum	370.9026

XYLENE TECHNICAL GRADE (MIN. 98.5 %)

Specification

- Mixture of isomers
- Identity (IR) complies
- Refractive index (20 °C) 1.4917 – 1.5017
- Residue on evaporation max. 100 ppm
- Water (KF) max. 200 ppm
- Benzene (C_6H_6) max. 50 ppm
- Total sulphur (S) max. 100 ppm

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	371.5000

XYLENE FOR SYNTHESIS (MIN. 98.5 %)

Specification

- Mixture of isomers
- Identity (IR) complies
- Refractive index (20 °C) 1.4917 – 1.5017
- Residue on evaporation max. 100 ppm
- Water (KF) max. 200 ppm
- Benzene (C_6H_6) max. 50 ppm
- Total sulphur (S) max. 100 ppm

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	300.1000

XYLENE FOR HISTOLOGY

Specification

- Mixture of isomers
- Refractive index (20 °C) 1.493 – 1.500
- Benzene (C_6H_6) max. 0.01 %

Quantity	Packaging Material	Art. no.
2.5 l	Glass bottle	399.2500
5 l	Plastic canister	399.5000

XYLENE P. A., ACS, ISO, PH. EUR., USP (MIN. 98.5 %)

Specification

- Mixture of isomers
- Identity (IR) complies
- Water max. 200 ppm
- Free acid max. 0.0005 %
- Aluminium (Al) max. 0.5 ppm
- Barium (Ba) max. 0.1 ppm
- Calcium (Ca) max. 0.5 ppm
- Cadmium (Cd) max. 0.05 ppm
- Cobalt (Co) max. 0.02 ppm
- Chromium (Cr) max. 0.02 ppm
- Copper (Cu) max. 0.02 ppm
- Iron (Fe) max. 0.1 ppm
- Magnesium (Mg) max. 0.1 ppm
- Manganese (Mn) max. 0.02 ppm
- Nickel (Ni) max. 0.02 ppm
- Lead (Pb) max. 0.02 ppm
- Tin (Sn) max. 0.1 ppm
- Zinc (Zn) max. 0.05 ppm
- Benzene (C_6H_6) max. 50 ppm
- Sulphur (S) max. 3 ppm
- Thiophene (C_4H_4S) max. 1 ppm
- Toluene ($C_6H_5CH_3$) max. 1.0 %
- Residue on evaporation max. 10 ppm
- Readily carbonisable substances complies
- Substances darkened by H_2SO_4 complies
- Colour (APHA) max. 10
- Acidity (as $C_7H_6O_2$) max. 14 ppm
- Alkalinity (as NH_3) max. 2 ppm
- Ethylbenzene (C_8H_{10}) max. 25 %
- For histological use.

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	360.1000
2.5 l	Glass bottle	360.2500
5 l	Plastic canister	360.5000
10 l	Plastic canister	360.9010
23 kg	Metal drum	360.9023

O-XYLENE

- C_8H_{10}
- M = 106.17 g/mol
- CAS-No. 95-47-6
- EC Index No. 601-022-00-9
- EC-No. 202-422-2
- Density 0.88 g/ml
- UN-No. 1307
- ADR 3, III

GHS

- H226 H312+H332 H315
- P210 P280 P302+P352 P510



Specification

- Clear liquid
- Melting point -25 °C
- Boiling point 144 °C

O-XYLENE FOR SYNTHESIS (MIN. 97.0 %)

Specification

- Non-volatile substances max. 0.002 %

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	312.1000

XYLENE SUBSTITUTE, ODOURLESS

- Density 0.756 – 0.791 g/ml
- UN-No. 3295
- ADR 3, III

GHS

- H226 H304 H336
- P210 P241 P242 P243 P261 P271 P273 P301+P310 P331 P303+P361+P353 P304+P340 P312 P403+P233 P403+P225 P405 P501



Specification

- Clear, colourless liquid
- Boiling point ~130 °C

XYLENE SUBSTITUTE, ODOURLESS

Specification

- Refractive index (20 °C) 1.4250 – 1.4360

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	320.5000

ZINC ACETATE DIHYDRATE

- $Zn(CH_3COO)_2 \times 2\ H_2O$
- M = 219.49 g/mol
- CAS-No. 5970-45-6
- EC-No. 209-170-2
- Density 1.74 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H410
- P262 P273 P501



Specification

- Colourless to white solid
- Melting point 237 °C

ZINC ACETATE DIHYDRATE PURISS., USP (99.0 – 102.0 %)

Specification

- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.005 %
- Iron (Fe) max. 0.005 %
- Potassium (K) max. 0.005 %
- Magnesium (Mg) max. 0.005 %
- Sodium (Na) max. 0.005 %
- Lead (Pb) max. 0.001 %
- Chloride (Cl) max. 0.005 %
- Sulphate (SO_4) max. 0.01 %
- Cadmium (Cd) max. 0.0002 %
- pH 5.8 – 7.0

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	112.1000

ZINC ACETATE DIHYDRATE P. A. (MIN. 99.5 %)

Specification

- Insoluble matter max. 0.005 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0005 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Magnesium (Mg) max. 0.0005 %
- Manganese (Mn) max. 0.0005 %
- Sodium (Na) max. 0.001 %
- Lead (Pb) max. 0.001 %
- Chloride (Cl) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Nitrogen (N) max. 0.001 %

Quantity	Packaging Material	Art. no.
250 g	Plastic bottle	105.0250
1 kg	Plastic bottle	105.1000

ZINC CHLORIDE

- $ZnCl_2$
- M = 136.28 g/mol
- CAS-No. 7646-85-7
- EC Index No. 030-003-00-2
- EC-No. 231-592-0
- Density 2.91 g/ml
- UN-No. 2331
- ADR 8, III

GHS

- H302 H314 H335 H410
- P260 P273 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P391

Danger



Specification

- Colourless solid
- Melting point 283 °C
- Boiling point 732 °C

ZINC CHLORIDE ANHYDROUS PURISS., DAB, PH. EUR,. BP, PH. FRANÇ., USP (98.0 – 100.5 %)

Specification

- pH 4.6 – 5.5
- Ammonium (NH_4) max. 0.03 %
- Arsenic (As) max. 0.0002 %
- Calcium (Ca) max. 0.01 %
- Iron (Fe) max. 0.001 %
- Potassium (K) max. 0.02 %
- Magnesium (Mg) max. 0.01 %
- Sodium (Na) max. 0.01 %
- Heavy metals (as Pb) max. 0.005 %
- Sulphate (SO_4) max. 0.02 %
- Nitrogen (N) max. 0.005 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	110.1000
25 kg	Fibre drum	110.9025

ZINC OXIDE

- ZnO
- M = 81.39 g/mol
- CAS-No. 1314-13-2
- EC Index No. 030-013-00-7
- EC-No. 215-222-5
- Density 5.61 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H410
- P273 P391 P501

Warning



Specification

- White amorphous powder

ZINC OXIDE PURISS. (MIN. 99.8 %)

Specification

- Colour white complies
- Shape amorphous powder complies
- Odour odourless complies
- Alkalinity (0.1 M HCl) max. 0.3 ml
- Lead (Pb) max. 20 ppm
- Cadmium (Cd) max. 10 ppm
- Arsenic (As) max. 5 ppm
- Iron (Fe) max. 10 ppm
- Loss on ignition (800 °C) max. 0.2 %
- Sieve residue (45 µm) max. 0.02 %
- Spec. surface 4.5 m2/g
- Bulk density 500 kg/m3

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	117.1000

ZINC SULPHATE HEPTAHYDRATE

- $ZnSO_4$ x 7 H_2O
- M = 287.54 g/mol
- CAS-No. 7446-20-0
- EC Index No. 030-006-00-9
- EC-No. 231-793-3
- Density 1.97 g/ml
- UN-No. 3077
- ADR 9, III

GHS

- H302 H318 H410
- P273 P280 P301+P312
  P305+P351+P338 P310 P391 P501



Specification

- Colourless powder
- Melting point 100 °C

ZINC SULPHATE HEPTAHYDRATE P. A., ACS, ISO, PH. EUR. (MIN. 99.5 %)

Specification

- Arsenic (As) max. 0.00005 %
- Calcium (Ca) max. 0.001 %
- Cadmium (Cd) max. 0.0002 %
- Copper (Cu) max. 0.0005 %
- Iron (Fe) max. 0.0005 %
- Potassium (K) max. 0.001 %
- Magnesium (Mg) max. 0.001 %
- Manganese (Mn) max. 0.0002 %
- Sodium (Na) max. 0.0005 %
- Lead (Pb) max. 0.0005 %
- Chloride (Cl) max. 0.0005 %
- Nitrogen (N) max. 0.0005 %
- pH (5 %, 25 °C) 4.4 – 6.0
- Insoluble matter max. 0.01 %
- Nitrate (NO_3) max. 0.002 %
- Ammonium (NH_4) max. 0.001 %

Quantity	Packaging Material	Art. no.
1 kg	Plastic bottle	123.1000

ZIRCONIUM(IV) OXIDE CHLORIDE OCTAHYDRATE

- $ZrOCl_2$ x 8 H_2O
- M = 322.28 g/mol
- CAS-No. 13520-92-8
- EC-No. 231-717-9
- Density 1.91 g/ml
- UN-No. 3260
- ADR 8, II

GHS

- H314
- P280 P301+P330+P331
  P305+P351+P338 P309 P311



Specification

- Colourless to white solid

ZIRCONIUM(IV) OXIDE CHLORIDE OCTAHYDRATE P. A. (MIN. 99.5 %)

Specification

- Iron (Fe) max. 0.001 %
- Titanium (Ti) max. 0.005 %
- Heavy metals (as Pb) max. 0.001 %
- Sulphate (SO_4) max. 0.005 %
- Hafnium (Hf) max. 3.0 %

Quantity	Packaging Material	Art. no.
100 g	Plastic bottle	129.0100



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VOLUMETRIC SOLUTIONS



READY TO USE VOLUMETRIC SOLUTIONS

AMMONIUM THIOCYANATE SOLUTION

Specification

- Colourless liquid

AMMONIUM THIOCYANATE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (0.1 N)

Specification

- Accuracy (20 °C) ±0.2 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2617.1000

BROMIDE BROMATE SOLUTION

GHS

- H350
- P201 P202 P280 P308+P313 P405 P501

Danger



Specification

- Liquid
- Melting point 0 °C
- Boiling point 100 °C

BROMIDE BROMATE SOLUTION 0.05 MOL/L (0.1 N)

Specification

- Assay 0.0995 – 0.1005 N
- Density (20 °C) 1.01 g/ml

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2595.1000

CERIUM SULPHATE SOLUTION

- UN-No. 2796
- ADR 8, II

GHS

- H314
- P280 P301+P330+P331
  P303+P361+P353 P305+P351+P338
  P308+P311 P501

Danger



CERIUM SULPHATE SOLUTION 0.1 MOL/L ACC. PH. EUR CHAPTER 4.2.2. (0.1 N)

Specification

- Assay 0.0997 – 0.1003 M
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2419.1011

EDTA DISODIUM SALT SOLUTION

- Melting point 0 °C
- Boiling point 100 °C

Specification

- Clear, colourless liquid

EDTA DISODIUM SALT SOLUTION 0.01783 MOL/L

- Density 1.00

Specification

- Accuracy ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2200.1011

EDTA DISODIUM SALT SOLUTION 0.05 MOL/L (0.1 N)

Specification

- Accuracy ±0.1 %
- Density 1.01 g/ml
- Tested by an ISO 17025 Accredited Test Method
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2214.1011
5 l	Plastic canister	2214.5011

EDTA DISODIUM SALT SOLUTION 0.1 MOL/L (0.2 N)

- 37.224 g $C_{10}H_{14}N_2Na_2O_8$ x 2 H_2O/l H_2O = 0.2 N

Specification

- Assay (colourimetric) 0.1996 – 0.2004 N
- Appearance of solution clear, colourless
- Density 1.03 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2204.1000
5 l	Polytainer	2204.5000

EDTA DISODIUM SALT SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. – EP REF. NO. 3005900 (0.1 N)

Specification

- Accuracy (20 °C) ±0.2 %
- Density 1.03 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2220.1011

HYDROCHLORIC ACID

HYDROCHLORIC ACID 0.01 MOL/L (0.01 N)

Specification

- Melting point 0 °C
- Boiling point 100 °C
- Accuracy ±0.5 %
- Density (20 °C) 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	862.1011
2.5 l	Plastic bottle	862.2511

HYDROCHLORIC ACID 0.1 MOL/L (0.1 N)

- UN-No. 1789
- ADR 8, III

GHS
- H290
- P234 P390 P406

Warning 

Specification
- Accuracy (20 °C) ±0.1 %
- Density 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	841.1000
5 l	Polytainer	841.5000
5 l	Plastic canister	841.5011
10 l	Polytainer	841.9510

HYDROCHLORIC ACID 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (0.1 N)

- UN-No. 1789
- ADR 8, III

GHS
- H290
- P234 P390 P406

Warning 

Specification
- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	808.1011

HYDROCHLORIC ACID 0.5 MOL/L (0.5 N)

- 18.23 g HCl/l H_2O = 0.5 N (±0.001/20 °C)
- UN-No. 1789
- ADR 8, III

GHS
- H290
- P390

Warning 

Specification
- Density 1.01 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	845.1000
5 l	Polytainer	845.5000

HYDROCHLORIC ACID 1.0 MOL/L (1.0 N)

- 36.461 g HCl/l H_2O = 1.0 N (±0.002/20 °C)
- UN-No. 1789
- ADR 8, III

GHS
- H290
- P390

Warning 

Specification
- Density 1.02 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	850.1000
5 l	Polytainer	850.5000
10 l	Polytainer	850.9510

HYDROCHLORIC ACID 1.0 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (1.0 N)

- UN-No. 1789
- ADR 8, III

GHS
- H290
- P390

Warning



Specification
- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	819.1011

HYDROCHLORIC ACID 2.0 MOL/L (2.0 N)

- 72.922 g HCl/l H_2O = 2.0 N (±0.004/20 °C)
- UN-No. 1789
- ADR 8, III

GHS
- H290
- P390

Warning



Specification
- Density 1.04 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	860.1000

HYDROCHLORIC ACID 3.0 MOL/L (3.0 N)

- UN-No. 1789
- ADR 8, II

GHS
- H312 H314 H335
- P260 P280 P303+P361+P353 P305+P351+P338 P405 P501

Danger



Specification
- Boiling point 85 °C
- Accuracy ±0.1 %
- Tested by an ISO 17025 Accredited Test Method
- Density (20 °C) 1.12 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	821.5011

HYDROCHLORIC ACID 4.0 MOL/L (4.0 N)

- UN-No. 1789
- ADR 8, II

GHS
- H312 H314 H335
- P260 P280 P303+P361+P353 P305+P351+P338 P405 P501

Danger



Specification
- Boiling point 85 °C
- Accuracy ±0.1 %
- Tested by an ISO 17025 Accredited Test Method
- Density (20 °C) 1.15 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	824.1011
2.5 l	Plastic bottle	824.2511
10 l	Plastic canister	824.9010
25 l	Plastic canister	824.9025

HYDROCHLORIC ACID 6.0 MOL/L (6.0 N)

- UN-No. 1789
- ADR 8, II

GHS

- H312 H314 H335
- P260 P280 P303+P361+P353 P305+P351+P338 P405 P501



Specification

- Boiling point 85 °C
- Accuracy ±0.1 %
- Assay 5.982 – 6.018 M
- Appearance clear, colourless
- Tested by an ISO 17025 Accredited Test Method
- Density (20 °C) 1.17 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	826.1011

IODINE SOLUTION

IODINE SOLUTION 0.05 MOL/L (0.1 N)

- 12.69 g I_2/l H_2O = 0.1 N (±0.0002/20 °C)

GHS

- H373
- P260 P314 P501



Specification

- Brown liquid
- Melting point 0 °C
- Boiling point 100 °C
- pH 5.8 – 6.2
- Density 1.02 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1805.1000
2.5 l	Glass bottle	1805.2500

IODINE SOLUTION 0.1 MOL/L ACC. HANUS (0.2 N)

- 2.68 g IBr/l CH_3COOH 100 % = 0.2 N (±0.004/20 °C)
- UN-No. 2789
- ADR 8 (3), II

GHS

- H226 H314
- P210 P280 P303+P361+P353 P304+P340 P305+P351+P338 P501



Specification

- Colourless liquid
- Density 1.05 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2284.1000

LEAD(II) NITRATE SOLUTION

- UN-No. 3082
- ADR 9, III

GHS

- H315 H318
- P280 P305+P351+P338 P310 P321 P362+P364 P332+P313



Specification

- Colourless liquid

LEAD(II) NITRATE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2.

Specification

- Assay (20 °C) 0.0995 – 0.1005 M
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2514.1011

MERCURY SULPHATE SOLUTION

MERCURY(II) SULPHATE SOLUTION FOR COD DETERMINATION

- 80 g HgSO4 + 5,884 g K2Cr2O7/l 10 % H2SO4 = 0,12 N
- Acc. DIN 38409-H41-1
- Density 1.18 g/ml
- UN-No. 3289
- ADR 6.1 (8), II

GHS

- H290 H301+H331 H310 H315 H319 H340 H350 H373 H410
- P201 P234 P260 P273 P280 P304+P340 P308+P311 P390 P403+P233 P501

Danger



Specification

- Orange liquid
- Melting point 0 °C
- Boiling point 100 °C

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1024.1000
2.5 l	Glass bottle	1024.2500

OXALIC ACID SOLUTION

OXALIC ACID SOLUTION 0.05 MOL/L (0.1 N)

- 6.31 g $C_2H_2O_4$ x 2 H_2O/l H_2O = 0.1 N (±0.0002/20 °C)

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
5 l	Plastic canister	1230.5000

PERCHLORIC ACID IN ANHYDROUS ACETIC ACID

- UN-No. 2920
- ADR 8 (3), II

GHS

- H226 H314
- P210 P241 P243 P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P310 P305+P351+P338 P321 P363 P370+378 P403+P235 P501

Danger



Specification

- Colourless liquid

PERCHLORIC ACID IN ANHYDROUS ACETIC ACID 0.1 MOL/L (0.1 N)

Specification

- Assay (potentiometric) 0.0998 – 0.1002 N

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1171.1000

POTASSIUM CHROMATE SOLUTION

- 50 g K_2CrO_4/l H_2O
- UN-No. 3287
- ADR 6.1, II

GHS
- H317 H340 H350i H360Fd H411
- P201 P260 P280 P303+P361+P353 P305+P351+P338 P308+P313 P391 P501



Specification
- Orange liquid
- Melting point 0 °C
- Boiling point 100 °C

POTASSIUM CHROMATE SOLUTION 50 G/L (5 % IN WATER)

Specification
- Density 1.05 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1604.1000

POTASSIUM DICHROMATE SOLUTION

- 5.884 g $K_2Cr_2O_7$/l H_2O = 0.12 N (±0.00024/20 °C)

GHS
- H317 H340 H350 H360FD H411
- P201 P260 P280 P303+P361+P353 P308+P313 P391 P501



Specification
- Orange liquid
- Melting point 0 °C
- Boiling point 100 °C

POTASSIUM DICHROMATE SOLUTION FOR COD DETERMINATION 0.02 MOL/L

Specification
- Density 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1602.1000
2.5 l	Plastic bottle	1602.2511

POTASSIUM HYDROXIDE SOLUTION

POTASSIUM HYDROXIDE SOLUTION 0.1 MOL/L (0.1 N)

- 5.61 g KOH/l H_2O = 0.1 N (±0.002/20 °C)

GHS
- H315 H319
- P280 P302+P352 P305+P351+P338 P332+P313 P362+P364 P337+P313



Specification
- Boiling point ~100 °C
- Assay (potentiometric) 0.0999 – 0.1001 N
- Density 1.01 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1663.1000

POTASSIUM HYDROXIDE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2.)

GHS

- H315 H319
- P280 P302+P352 P305+P351+P338 P332+P313 P362+P364 P337+P313

Warning



Specification

- Assay (20 °C) 0.0997 – 0.1003 M
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1612.1011

POTASSIUM HYDROXIDE SOLUTION IN ETHANOL

Specification

- Colourless to yellow-brownish liquid
- Melting point -114.5 °C (ethanol)
- Boiling point 78 °C

POTASSIUM HYDROXIDE SOLUTION IN ETHANOL 0.1 MOL/L (0.1 N)

- 5.612 g KOH/l C_2H_5OH = 0.1 N (±0.0005/20 °C)
- UN-No. 2924
- ADR 3 (8), II

GHS

- H225 H315 H319
- P210 P233 P241 P243 P280 P332+P313 P337+P313 P403+P235 P501

Danger



Specification

- Density 0.84 g/ml
- Traceable to SRM from NIST
- Solution may become brown on standing.

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1611.1000

POTASSIUM HYDROXIDE SOLUTION IN ETHANOL 0.5 MOL/L ACC. TO ASTM D-94, D-128 (0.5 N)

- 28.055 g KOH/l C_2H_5OH = 0.5 N (±0.001/20 °C)
- UN-No. 2924
- ADR 3 (8), II

GHS

- H225 H314
- P210 P243 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P312 P403+P233 P501

Danger



Specification

- Density 0.85 g/ml
- Traceable to SRM from NIST
- Solution may become brown on standing.

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1625.1000

POTASSIUM HYDROXIDE SOLUTION IN ETHANOL 0.5 MOL/L ACC. PH. EUR. CHAPTER 4.2.2.

- UN-No. 2924
- ADR 3 (8), II

GHS

- H225 H314
- P210 P243 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P312 P403+P233 P501

Danger



Specification

- Accuracy ±0.2 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1608.1000

POTASSIUM PERMANGANATE SOLUTION

- UN-No. 3082
- ADR 9, III

GHS
- H411
- P273 P501



Specification
- Purple-black liquid
- Melting point 0 °C
- Boiling point 100 °C

POTASSIUM PERMANGANATE SOLUTION 0.02 MOL/L (0.1 N)

- 3.161 g $KMnO_4$/l H_2O = 0.1 N (±0.0002/20 °C)

Specification
- Density 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1675.1000
2.5 l	Glass bottle	1675.2500

POTASSIUM PERMANGANATE SOLUTION 0.02 MOL/L ACC. PH. EUR. CHAPTER 4.2.2.

Specification
- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1662.1000

SILVER NITRATE SOLUTION

- UN-No. 3082
- ADR 9, III

GHS
- H315 H319 H410
- P273 P280 P332+P313 P337+P313 P391 P501



Specification
- Colourless liquid

SILVER NITRATE SOLUTION 0.1 MOL/L (0.1 N)

- $AgNO_3$ in H_2O

Specification
- Melting point 0 °C
- Boiling point 100 °C
- Assay 0.0998 – 0.1002 M
- Traceable to SRM from NIST
- Density 1.01 g/ml

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	881.1000
5 l	Polytainer	881.5000
10 l	Polytainer	881.9011

SILVER NITRATE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2.

- $AgNO_3$ in H_2O

Specification
- Accuracy (20 °C) ±0.2 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	803.1011

SILVER SULPHATE SOLUTION

- UN-No. 1830
- ADR 8, II

GHS

- H290 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P390 P501



Specification

- Colourless liquid

SILVER SULPHATE SOLUTION FOR COD DETERMINATION (10 G/L IN H_2SO_4)

Specification

- Silver sulphate (Ag_2SO_4) 9.0 – 11.0 g/l
- Density 1.84 g/ml

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	811.1000
2.5 l	Glass bottle	811.2500

SODIUM CHLORIDE SOLUTION

Specification

- Colourless liquid
- Melting point 0 °C
- Boiling point 100 °C

SODIUM CHLORIDE SOLUTION 0.1 MOL/L (0.1 N)

Specification

- Accuracy ±0.2 %
- Density (20 °C) 1.01 g/ml

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1398.1011

SODIUM HYDROXIDE SOLUTION

SODIUM HYDROXIDE SOLUTION 0.01 MOL/L (0.01 N)

Specification

- Melting point 0 °C
- Boiling point 100 °C
- Assay 0.00996 – 0.01004 M
- Density (20 °C) 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1374.1011

SODIUM HYDROXIDE SOLUTION 0.1 MOL/L (0.1 N)

Specification

- Melting point 0 °C
- Boiling point 100 °C
- Accuracy (20 °C) ±0.2 %
- Density 1.01 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1331.1000
5 l	Polytainer	1331.5000
10 l	Polytainer	1331.9510

SODIUM HYDROXIDE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (0.1 N)

Specification

- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1321.1011

SODIUM HYDROXIDE SOLUTION 0.25 MOL/L (0.25 N)

- 10 g NaOH/l H_2O = 0.25 N (±0.0005/20 °C)
- UN-No. 1824
- ADR 8, III

GHS

- H315 H319
- P280 P302+P352 P305+P351+P338

Warning



Specification

- Melting point 0 °C
- Boiling point 100 °C
- Density 1.01 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1333.1000

SODIUM HYDROXIDE SOLUTION 0.5 MOL/L (0.5 N)

- 20 g NaOH/l H_2O = 0.5 N (±0.001/20 °C)
- UN-No. 1824
- ADR 8, III

GHS

- H290 H315 H319
- P280 P302+P352 P305+P351+P338 P337+P313

Warning



Specification

- Melting point 0 °C
- Boiling point 100 °C
- Density 1.02 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1335.1000
5 l	Polytainer	1335.5000

SODIUM HYDROXIDE SOLUTION 1.0 MOL/L (1.0 N)

- 40 g NaOH/l H_2O = 1 N (±0.002/20 °C)
- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P234 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P390 P501

Danger



Specification

- Melting point 0 °C
- Boiling point 100 °C
- Density 1.04 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1340.1000
5 l	Polytainer	1340.5000
10 l	Polytainer	1340.9510

SODIUM HYDROXIDE SOLUTION 1.0 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (1.0 N)

- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P234 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P390 P501



Specification

- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1300.1011

SODIUM HYDROXIDE SOLUTION 2.0 MOL/L (2.0 N)

- 80 g NaOH/l H_2O = 2 N (±0.004/20 °C)
- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P280 P301+P330+P331 P308+P311 P501



Specification

- Melting point 0 °C
- Boiling point 100 °C
- Density (20 °C) 1.09 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1350.1000

SODIUM THIOSULPHATE SOLUTION

Specification

- Colourless liquid
- Melting point 0 °C
- Boiling point 100 °C

SODIUM THIOSULPHATE SOLUTION 0.01 MOL/L (0.01 N)

- 2.482 g $Na_2S_2O_3$ x 5 H_2O/l H_2O = 0.01 N (±0.00002/20 °C)

Specification

- Density 1.00 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1369.1000

SODIUM THIOSULPHATE SOLUTION 0.1 MOL/L (0.1 N)

Specification

- Accuracy (20 °C) ±0.2 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1356.1000
5 l	Polytainer	1356.5000
10 l	Polytainer	1356.9510

SODIUM THIOSULPHATE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (0.1 N)

Specification

- Accuracy (20 °C) ±0.2 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1312.1011

SULPHURIC ACID

- CAS-No. 7664-93-9
- EC Index No. 016-020-00-8
- EC-No. 231-639-5

SULPHURIC ACID 0.05 MOL/L (0.1 N)

- 4.905 g H_2SO_4/l H_2O = 0.1 N (±0.0002/20 °C)

GHS

- H290 H315 H319
- P280 P305+P351+P338

Danger 

Specification

- Colourless liquid
- Density 1.01 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	815.1000
5 l	Polytainer	815.5000

SULPHURIC ACID 0.5 MOL/L (1.0 N)

- 49.04 g H_2SO_4/l H_2O = 1.0 N (±0.002/20 °C)
- UN-No. 3264
- ADR 8, III

GHS

- H314
- P280 P303+P361+P353 P501

Danger 

Specification

- Colourless liquid
- Density 1.03 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	855.1000
5 l	Polytainer	855.5000
10 l	Polytainer	855.9510

WIJS SOLUTION

- UN-No. 2789
- ADR 8 (3), II

GHS

- H226 H290 H314
- P210 P233 P260 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P390 P403+P235 P501

Danger 

Specification

- Brown liquid

WIJS SOLUTION FOR DETERMINATION OF THE IODINE NUMBER 0.1 MOL/L (0.2 N)

- 16.24 g ICl/l CH_3COOH 100 % = 0.2 N (±0.004/20 °C)

Specification

- Insoluble matter max. 0.005 %
- Density 1.06 g/ml
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	1810. 1000

ZINC SULPHATE SOLUTION

- UN-No. 3082
- ADR 9, III

GHS

- H319 H411
- P264 P273 P280 P305+P351+P338 P337+P313 P501

Warning



ZINC SULPHATE SOLUTION 0.1 MOL/L ACC. PH. EUR. CHAPTER 4.2.2. (0.1 N)

Specification

- Colourless liquid
- Assay (20 °C) 0.0995 – 0.1005 M
- Accuracy (20 °C) ±0.1 %
- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	120.1011











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CONCENTRATED VOLUMETRIC SOLUTIONS

ACETIC ACID VOLUMETRIC SOLUTIONS

- CH_3COOH
- UN-No. 2790
- ADR 8, III

ACETIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(CH_3COOH) 0.1 MOL/L (0.1 N)

GHS
- H315 H319
- P280 P302+P352 P305+P351+P338 P332+P313 P337+P313 P501



Specification
- Assay 0.0995 – 0.1005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	2264.0001

ACETIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(CH_3COOH) 1 MOL/L (1 N)

GHS
- H312 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P405 P501



Specification
- Assay 0.995 – 1.005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	2243.0001

AMMONIUM THIOCYANATE VOLUMETRIC SOLUTION

- $(NH_4)SCN$

AMMONIUM THIOCYANATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($(NH_4)SCN$) 0.1 MOL/L (0.1 N)

Specification
- Assay 0.0995 – 0.1005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	2619.0001

BROMIDE BROMATE VOLUMETRIC SOLUTION

- Br_2

GHS
- H350
- P201 P202 P280 P308+P313P405 P501



BROMIDE BROMATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(Br_2) 0.05 MOL/L (0.1 N)

Specification
- Assay 0.04975 – 0.05025 M
- Potassium bromate/bromide solution

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1639.0001

EDTA DISODIUM SALT VOLUMETRIC SOLUTION

- Na_2-EDTA x 2 H_2O
- UN-No. 1824
- ADR 8, II

GHS

- H314
- P260 P280 303+361+P353 P305+P351+P338 P310 P501

Danger 

EDTA DISODIUM SALT SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(Na_2-EDTA X 2 H_2O) 0.1 MOL/L (0.2 N)

Specification

- Assay 0.0997 – 0.1003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	2291.0001

HYDROCHLORIC ACID VOLUMETRIC SOLUTIONS

- HCl

HYDROCHLORIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(HCl) 0.1 MOL/L (0.1 N)

- UN-No. 1789
- ADR 8, III

GHS

- H290
- P234 P390 P406

Warning 

Specification

- Assay 0.0995 – 0.1005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	814.0001

HYDROCHLORIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(HCl) 0.2 MOL/L (0.2 N)

- UN-No. 1789
- ADR 8, III

GHS

- H290 H315 H319 H335
- P101 P102 P103 P261 P271 P280 P302+P352 P304+P340 P305+P351+P338 P312 P390 P403+P233 P501

Warning 

Specification

- Assay 0.1994 – 0.2006 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	832.0001

HYDROCHLORIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(HCl) 0.5 MOL/L (0.5 N)

- UN-No. 1789
- ADR 8, III

GHS

- H290 H315 H319 H335
- P261 P264 P280 P302+P352 P304+P340 P305+P351+P338 P312 P390 P501

Warning 

Specification

- Assay 0.4975 – 0.5025 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	835.0001

HYDROCHLORIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(HCl) 1 MOL/L (1 N)

- UN-No. 1789
- ADR 8, II

GHS

- H290 H314 H335
- P260 P264 P280 P303+P361+P353 P305+P351+P338 P310 P390 P501

Danger





Specification

- Assay 0.997 – 1.003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	840.0001

IODIDE-IODATE VOLUMETRIC SOLUTION

- I_2

GHS

- H319
- P264 P280 P305+P351+P338 P337+P313

Warning



IODIDE-IODATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(I_2) 1/128 MOL/L (1/64 N)

Specification

- Assay 0.015578 – 0.015672 N
- Potassium iodate/iodide solution

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	1691.0001

IODINE VOLUMETRIC SOLUTION

- I_2
- UN-No. 2922
- ADR 8 (6.1), I

GHS

- H372
- P260 P280 P314 P501

Danger



IODINE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(I_2) 0.05 MOL/L (0.1 N)

Specification

- Assay 0.04985 – 0.05015 M

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	1823.0001

NITRIC ACID VOLUMETRIC SOLUTION

- HNO_3
- UN-No. 2031
- ADR 8, II

GHS

- H290 H331 H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P501

Danger





NITRIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(HNO_3) 1 MOL/L (1 N)

Specification

- Assay 0.995 – 1.005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	861.0001

OXALIC ACID VOLUMETRIC SOLUTION

- $C_2H_2O_4$

OXALIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C($C_2H_2O_4$) 0.05 MOL/L (0.1 N)

Specification

- Assay 0.04985 – 0.05015 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1250.0001

POTASSIUM BROMATE VOLUMETRIC SOLUTION

- $KBrO_3$

GHS

- H302 H350
- P201 P202 P280 P303+P361+P353 P308+P313 P405 P501



POTASSIUM BROMATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($KBrO_3$) 1/60 MOL/L (0.1 N)

Specification

- Assay 0.0995 – 0.1005 N

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	1606.0001

POTASSIUM DICHROMATE VOLUMETRIC SOLUTION

- $K_2Cr_2O_7$
- UN-No. 2922
- ADR 8 (6.1), I

GHS

- H332 H314 H334 H317 H340 H350 H360FD H335 H411
- P201 P260 P273 P284 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P362+P364 P391 P403+P233 P501



POTASSIUM DICHROMATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($K_2Cr_2O_7$) 1/60 MOL/L (0.1 N)

Specification

- Assay 0.0997 – 0.1003 N

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1647.0001

POTASSIUM HYDROXIDE VOLUMETRIC SOLUTIONS

- KOH
- UN-No. 1814
- ADR 8, II

POTASSIUM HYDROXIDE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(KOH) 0.1 MOL/L (0.1 N)

GHS

- H290 H314
- P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P390 P501



Specification

- Assay 0.0995 – 0.1005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1667.0001

POTASSIUM HYDROXIDE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(KOH) 1 MOL/L (1 N)

GHS
- H290 H302 H314
- P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P390 P501

Danger





Specification
- Assay 0.997 – 1.003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1671.0001

POTASSIUM IODATE VOLUMETRIC SOLUTION

- KIO_3

GHS
- H318
- P280 P305+P351+P338 P310

Danger



POTASSIUM IODATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(KIO_3) 1/60 MOL/L (0.1 N)

Specification
- Assay 0.0997 – 0.1003 N

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	1686.0001

POTASSIUM PERMANGANATE VOLUMETRIC SOLUTION

- $KMnO_4$
- UN-No. 3082
- ADR 9, II

GHS
- H410
- P273 P391 P501

Warning



POTASSIUM PERMANGANATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($KMnO_4$) 0.02 MOL/L (0.1 N)

Specification
- Assay 0.0199 – 0.0201 M

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	1659.0001

SILVER NITRATE VOLUMETRIC SOLUTION

- $AgNO_3$
- UN-No. 1760
- ADR 8, II

GHS
- H314 H410
- P273 P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P309+P311 P391 P501

Danger





SILVER NITRATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($AgNO_3$) 0.1 MOL/L (0.1 N)

Specification
- Assay 0.0995 – 0.1005 M

Quantity	Packaging Material	Art. no.
1 Amp.	Glass ampoule	848.0001

SODIUM HYDROXIDE VOLUMETRIC SOLUTIONS

- NaOH

SODIUM HYDROXIDE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(NaOH) 0.01 MOL/L (0.01 N)

- UN-No. 1824
- ADR 8, III

GHS

- H315 H319
- P280 P302+P352 P305+P351+P338 P332+P313 P337+P313



Specification

- Assay 0.00997 – 0.01003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1325.0001

SODIUM HYDROXIDE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(NaOH) 0.1 MOL/L (0.1 N)

- UN-No. 1824
- ADR 8, II

GHS

- H314
- P280 P301+P330+P331 P303+P361+P353 P305+P351+P338 P310 P501



Specification

- Assay 0.0997 – 0.1003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1332.0001

SODIUM HYDROXIDE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C(NaOH) 1 MOL/L (1 N)

- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P280 P301+P330+P331 P302+P352 P303+P361+P353 P305+P351+P338 P310 P501



Specification

- Assay 0.995 – 1.005 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1341.0001

SODIUM THIOSULPHATE VOLUMETRIC SOLUTIONS

- $Na_2S_2O_3$

SODIUM THIOSULPHATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($Na_2S_2O_3$) 0.01 MOL/L (0.01 N)

Specification

- Assay 0.00997 – 0.01003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1371.0001

SODIUM THIOSULPHATE SOLUTION FOR 1000 ML VOLUMETRIC SOLUTION C($Na_2S_2O_3$) 0.1 MOL/L (0.1 N)

Specification

- Assay 0.0997 – 0.1003 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	1387.0001

SULPHURIC ACID VOLUMETRIC SOLUTIONS

- H_2SO_4
- UN-No. 2796
- ADR 8, II

SULPHURIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(H_2SO_4) 0.05 MOL/L (0.1 N)

GHS

- H315 H319
- P280 P302+P352 P305+P351+P338 P332+P313 P337+P313

Warning



Specification

- Assay 0.04985 – 0.05015 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	875.0001

SULPHURIC ACID FOR 1000 ML VOLUMETRIC SOLUTION C(H_2SO_4) 0.5 MOL/L (1 N)

GHS

- H314
- P260 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P405 P501

Danger



Specification

- Assay 0.4985 – 0.5015 M

Quantity	Packaging Material	Art. no.
1 Amp.	PE ampoule	895.0001

INDICATOR SOLUTIONS



BROMOCRESOL GREEN-METHYL RED

BROMOCRESOL PURPLE 1 % (W/W) AQUEOUS SOLUTION

Quantity	Packaging Material	Art. no.
500 ml	Glass bottle	2776.0500

FEHLING SOLUTION

FEHLING SOLUTION I

- UN-No. 3082
- ADR 9, III

GHS

- H411
- P273 P391 P501



Specification

- Blue liquid
- Melting point 0 °C
- Boiling point 100 °C
- Assay ($CuSO_4$ x 5 H_2O) 69.12 – 69.40 g/l
- Density (20 °C) 1.037 – 1.043 g/ml

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2779.1000
2.5 l	Plastic bottle	2779.2500

FEHLING SOLUTION II

- UN-No. 1824
- ADR 8, II

GHS

- H290 H314
- P280 P303+P361+P353
  P305+P351+P338 P310 P390 P501

Danger 

Specification

- Clear, colourless liquid
- Boiling point 105 °C
- Alkalinity (as NaOH) 119 – 121 ‰
- Density (20 °C) 1.259 – 1.265 g/ml

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2277.1000
2.5 l	Plastic bottle	2277.2500

FERROIN SOLUTION

GHS

- H412
- P273 P501

FERROIN SOLUTION (REDOX INDICATOR)

Specification

- Sensitivity test colour change red-colourless complies

Quantity	Packaging Material	Art. no.
100 ml	Glass bottle	2781.0100

METHYL ORANGE SOLUTION

METHYL ORANGE SOLUTION 0.04 % IN DENATURED ETHANOL

- UN-No. 1170
- ADR 3, III

GHS

- H226 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
500 ml	Glass bottle	2793.0500

METHYL ORANGE SOLUTION 0.1 % IN ETHANOL

- UN-No. 1170
- ADR 3, II

GHS

- H226 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
250 ml	Glass bottle	2791.0250

METHYL RED SOLUTION

- UN-No. 1170
- ADR 3, III

GHS

- H225 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



METHYL RED SOLUTION 0.1 % IN DENATURED ETHANOL

Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
125 ml	Plastic bottle	2794.0125
250 ml	Plastic bottle	2794.0250

PHENOLPHTHALEIN SOLUTION

PHENOLPHTHALEIN SOLUTION 0.1 % IN DENATURED ETHANOL

- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
250 ml	Glass bottle	2763.0250
500 ml	Glass bottle	2763.0500

PHENOLPHTHALEIN SOLUTION 0.5 % IN DENATURED ETHANOL

- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
1 l	Glass bottle	2766.1000

PHENOLPHTHALEIN SOLUTION 1 % IN DENATURED ETHANOL

- UN-No. 1170
- ADR 3, III

GHS

- H225 H319 H341 H350
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
250 ml	Plastic bottle	2761.0250
500 ml	Glass bottle	2761.0500
1 l	Plastic bottle	2761.1011

STARCH SOLUTION

STARCH SOLUTION 1 %

Specification

- Sensitivity test complies

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	2753.0500

TASHIRO INDICATOR

- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P233 P241 P243 P280 P305+P351+P338 P337+P313 P403+P235



TASHIRO INDICATOR (METHYL RED/METHYLENE BLUE IN ETHANOL)

Specification

- Sensitivity complies

Quantity	Packaging Material	Art. no.
250 ml	Plastic bottle	726.0250

UNIVERSAL INDICATOR SOLUTION

- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P241 P280 P303+P361+P353 P305+P351+P338 P501



UNIVERSAL INDICATOR SOLUTION

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	2749.0500

DISSOLUTION MEDIA



DISSOLUTION MEDIA READY TO USE (RTU)

ACETATE BUFFER PH 5.50 (±0.02/25°C)

Specification

- Compliant to Ph. Eur.
- Consisting of CAS 7732-18-5 purified water, CAS 127-09-3 sodium acetate, CAS 64-19-7 acetic acid.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3010.1000

BUFFERED SODIUM DODECYL SULPHATE PH 7 (±0.02/25°C)

Specification

- Compliant to Ph. Eur. & USP
- Consisting of CAS 7732-18-5 purified water, CAS 151-21-3 sodium dodecyl sulfate, CAS 7558-80-7 sodium dihydrogen phosphate.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3020.1000

FASSIF V2 SOLUTION PH 6.50 (25°C), WITHOUT ENZYME (±0.02/25°C)

GHS

- H317
- P261 P280 P362+P364 P333+P313 P321 P501



Specification

- Tested by an ISO 17025 Accredited Test Method
- Consisting of CAS 110-16-7 maleic acid, CAS 7732-18-5 purified water, CAS 7647-14-5 sodium chloride, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
1l	HDPE bottle	3084.1000

FESSIF V2 SOLUTION PH 5.8 (25°C), WITHOUT ENZYME (±0.02/25°C)

GHS

- H317
- P261 P280 P362+P364 P333+P313 P321 P501



Specification

- Tested by an ISO 17025 Accredited Test Method
- Consisting of CAS 110-16-7 maleic acid, CAS 7732-18-5 purified water, CAS 7647-14-5 sodium chloride, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3088.1000

HCL/NaCL SOLUTION PH 1.2 (±0.02/25°C)

- Compliant to Ph. Eur.

Quantity	Packaging Material	Art. no.
10 l	HDPE container	3035.9010

HYDROCHLORIC ACID 0.1 N

- Compliant to Ph. Eur. & USP
- Density 0.9985 g/ml

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3030.1000

PHOSPHATE BUFFER PH 4.50 (±0.02/25°C)

Specification

- Compliant to Ph. Eur.
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate.

Quantity	Packaging Material	Art. no.
10 l	HDPE container	3045.9010

POTASSIUM PHOSPHATE PH 6.8 (±0.02/25°C)

Specification

- Compliant to Ph. Eur. & USP
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3050.1000

POTASSIUM PHOSPHATE PH 7.2 (±0.02/25°C)

Specification

- Compliant to Ph. Eur. & USP
- Consisting of CAS 7732-18-5 purified water, CAS 7558-79-4 disodium hydrogen phosphate, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3055.1000

POTASSIUM PHOSPHATE PH 7.5 (±0.02/25°C)

Specification

- Compliant to Ph. Eur. & USP
- Consisting of CAS 7732-18-5 purified water, CAS 7558-79-4 disodium hydrogen phosphate, CAS 1310-58-3 potassium hydroxide.

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3060.1000

SIMULATED GASTRIC FLUID, WITHOUT ENZYME

Specification

- Compliant to Ph. Eur. & USP
- pH (25 °C) 1.00 – 1.40 g/ml
- Consisting of CAS 7732-18-5 purified water, hydrochloric acid 37%, CAS 7647-14-5 sodium chloride.
- Density 1.18 g/ml

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3080.1000

SIMULATED INTESTINAL FLUID, WITHOUT ENZYME

Specification

- Compliant to Ph. Eur. & USP
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate, CAS 1310-73-2 sodium hydroxide.
- pH 6.47 – 6.53
- Density 1.0016 g/ml

Quantity	Packaging Material	Art. no.
1 l	HDPE bottle	3082.1000

DISSOLUTION MEDIA CONCENTRATES

ACETATE BUFFER PH 4.5 (±0.02/25°C)

- UN-No. 1760
- ADR 8, II

GHS
- H314
- P303+P361+P353 P305+P351+P338 P310 P321 P405 P501



Specification
- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 4-19-7 acetic acid, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
250 ml	HDPE bottle	3005.0250

HYDROCHLORIC ACID 0.01 N

- UN-No. 1789
- ADR 8, II

GHS
- H314
- P260 P264 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310 P321 P363 P405 P501



Specification
- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l

Quantity	Packaging Material	Art. no.
250 ml	HDPE bottle	3033.0250

HYDROCHLORIC ACID 0.1 N

- UN-No. 1789
- ADR 8, II

GHS
- H302 H314 H335
- P280 P301+P361+P353 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P501



Specification
- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l

Quantity	Packaging Material	Art. no.
250 ml	HDPE bottle	3038.0250

PHOSPHATE BUFFER PH 6.8 (±0.05/25°C)

Specification
- Compliant to JP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 7558-79-4 disodium hydrogen phosphate, CAS 7778-77-0 potassium dihydrogen phosphate.

Quantity	Packaging Material	Art. no.
500 ml	HDPE bottle	3043.0500

POTASSIUM PHOSPHATE PH 5.8 (±0.02/25°C)

Specification

- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 10028-24-7 disodium hydrogen phosphate dihydrate, CAS 7778-77-0 potassium dihydrogen phosphate.

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3048.0384

POTASSIUM PHOSPHATE PH 6.0 (±0.02/25°C)

GHS

- H315 H319
- P264 P280 P305+P351+P338 P332+P313 P362+P364 P337+P313

Warning



Specification

- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 10039-32-4 disodium hydrogen phosphate dodecahydrate, CAS 7778-77-0 potassium dihydrogen phosphate.

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3053.0384

POTASSIUM PHOSPHATE PH 6.8 (±0.05/25°C)

GHS

- H314
- P280 P303+P361+P353 P305+P351+P338 P310 P501

Danger



Specification

- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 10039-32-4 disodium hydrogen phosphate dodecahydrate, CAS 7778-77-0 potassium dihydrogen phosphate.
-

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3058.0384

POTASSIUM PHOSPHATE PH 7.2 (±0.05/25°C)

GHS

- H314
- P303+P361+P353 P305+P351+P338 P310 P321 P405 P501

Danger



Specification

- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3063.0384

POTASSIUM PHOSPHATE PH 7.4 (±0.05/25°C)

GHS
- H314
- P303+P361+P353 P305+P351+P338 P310 P321 P405 P501



Specification
- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate, CAS 1310-73-2 sodium hydroxide.

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3073.0384

POTASSIUM PHOSPHATE PH 7.5 (±0.05/25°C)

GHS
- H314
- P303+P361+P353 P305+P351+P338 P310 P321 P405 P501



Specification
- Compliant to Ph. Eur. & USP
- Concentrate, dilute to 10 l
- Consisting of CAS 7732-18-5 purified water, CAS 7778-77-0 potassium dihydrogen phosphate, CAS 1310-58-3 potassium hydroxide.

Quantity	Packaging Material	Art. no.
384 ml	HDPE bottle	3068.0384

SODIUM LAURYL SULPHATE SOLUTION 0.50 %

- Density 1.0086 g/ml

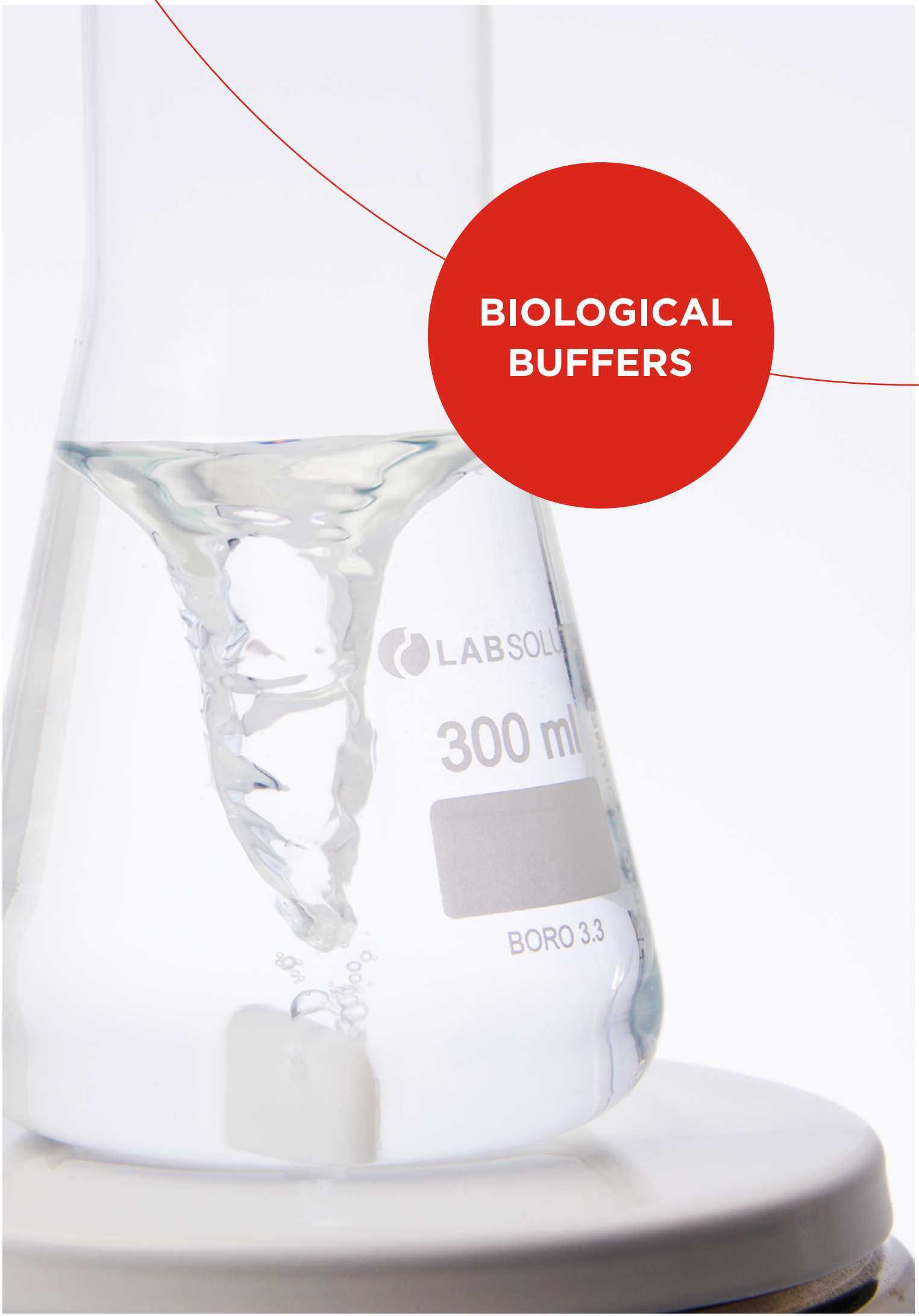
GHS
- H332 H315 H318
- P261 P280 P305+P351+P338 P310 P321 P362+P364



Specification
- compliant to USP
- Concentrate, dilute to 10 l

Quantity	Packaging Material	Art. no.
500 ml	HDPE bottle	3015.0500

BIOLOGICAL BUFFERS



READY-TO-USE BIOLOGICAL BUFFERS

PBS 1X, PH 7.4, 1000 ML (PHOSPHATE BUFFERED SALINE)

Specification

- Tablets, 28 mm diameter
- pH (25 °C) 7.40 ±0.05
- Weight 10.0 g ±1 %
- Optical clarity clear solution
- One tablet dissolved in 1000 ml of deionized water yields:
  0.14 M NaCl
  0.0027 M KCl
  0.010 M Phosphate buffer

Quantity	Packaging Material	Art. no.
100 Tablets	Plastic box	8435.0100

PBS 1X, PH 7.4, 500 ML (PHOSPHATE BUFFERED SALINE)

Specification

- Tablets, 25 mm diameter
- pH (25 °C) 7.4 ±0.05
- Weight 5.0 g ±1 %
- Optical clarity clear solution
- One tablet dissolved in 500 ml of deionized water yields:
  0.14 M NaCl
  0.0027 M KCl
  0.010 M Phosphate buffer

Quantity	Packaging Material	Art. no.
12 Tablets	Blister	8418.0012
100 Tablets	Plastic box	8418.0100

PBS 10X, POWDER FOR 1000 ML (PHOSPHATE BUFFERED SALINE 10X)

Specification

- White powder
- pH (25 °C) 7.4 ±0.05
- Weight 100 g ±1 %
- Optical clarity clear solution
- Each pouch dissolved in 1000 ml of deionized water yields:
  1.4 M NaCl
  0.027 M KCl
  0.10 M Phosphate buffer

Quantity	Packaging Material	Art. no.
5 Pouches	Pouch	8461.0005

PBS 10X, POWDER FOR 5000 ML (PHOSPHATE BUFFERED SALINE 10X)

Specification

- White powder
- pH (25 °C) 7.4 ±0.05
- Weight 100 g ±1 %
- Optical clarity clear solution
- Each pouch dissolved in 5000 ml of deionized water yields:
  1.4 M NaCl
  0.027 M KCl
  0.10 M Phosphate buffer

Quantity	Packaging Material	Art. no.
5 Pouches	Pouch	8462.0005

ANALYTICAL MEASUREMENT AND TESTING



BUFFER SOLUTIONS IN TWIN NECK BOTTLES, COLOUR CODED (20 °C)

BUFFER SOLUTION pH 4.00 COLOUR CODED (RED) (pH 4.00 (±0.01/20 °C))

Specification

- Red liquid
- Standardized against NIST reference material
- Potassium hydrogen phthalate

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1134.0252
1 l	Plastic twin neck bottle	1134.1012

BUFFER SOLUTION pH 7.00 COLOUR CODED (YELLOW) (pH 7.00 (±0.01/20 °C))

Specification

- Yellow liquid
- Standardized against NIST reference material
- Potassium dihydrogen phosphate - Disodium hydrogen phosphate

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1137.0252
1 l	Plastic twin neck bottle	1137.1012

BUFFER SOLUTION pH 10.00 COLOUR CODED (BLUE) (pH 10.00 (±0.01/20 °C))

Specification

- Blue liquid
- Standardized against NIST reference material
- di-Sodium tetraborate - Sodium hydroxide

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1140.0252
1 l	Plastic twin neck bottle	1140.1012

BUFFER SOLUTIONS IN TWIN NECK BOTTLES, COLOURLESS (25 °C)

BUFFER SOLUTION pH 3.776 (pH 3.776 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Potassium dihydrogen citrate 50 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1123.0252

BUFFER SOLUTION pH 4.005 (pH 4.005 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Potassium hydrogen phthalate 50 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1125.0252
1 l	Plastic twin neck bottle	1125.1012

BUFFER SOLUTION pH 6.865 (pH 6.865 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Potassium dihydrogen phosphate 25 mmol/l, disodium hydrogen phosphate 25 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	6626.1012

BUFFER SOLUTION pH 6.881 (pH 6.881 (±0.010 /20 °C) NIST VALUE)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Potassium dihydrogen phosphate 25 mmol/l, disodium hydrogen phosphate 25 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
1 l	Plastic twin neck bottle	1126.1012

BUFFER SOLUTION pH 7.413 (pH 7.413 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Potassium dihydrogen phosphate 9 mmol/l, disodium hydrogen phosphate 30 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1128.0252
1 l	Plastic twin neck bottle	1128.1012

BUFFER SOLUTION pH 9.180 (pH 9.180 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- di-Sodium tetraborate decahydrate 10 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1131.0252
1 l	Plastic twin neck bottle	1131.1012

BUFFER SOLUTION pH 10.012 (pH 10.012 (±0.010/25 °C) ACC. DIN 19266)

Specification

- Colourless liquid
- Traceable to SRM from NIST
- Sodium carbonate 25 mmol/l, Sodium bicarbonate 25 mmol/l
- Added germicide max. 0.01 %

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1132.0252
1 l	Plastic twin neck bottle	1132.1012

BUFFER SOLUTIONS, COLOUR CODED (20 °C)

BUFFER SOLUTION pH 4.00 COLOUR CODED (RED) (pH 4.00 (±0.02/20 °C))

Specification

- Red liquid
- Standardized against NIST reference material
- HCl-$C_6H_8O_7$-NaN_3-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1124.1000

BUFFER SOLUTION pH 7.00 COLOUR CODED (GREEN) (pH 7.00 (±0.02/20 °C))

Specification

- Green liquid
- Standardized against NIST reference material
- KH_2PO_4-Na_2HPO_4-NaN_3

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1127.1000

BUFFER SOLUTION pH 9.00 COLOUR CODED (BLUE) (pH 9.00 (±0.02/20 °C))

Specification

- Blue liquid
- Standardized against NIST reference material
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1129.1000

BUFFER SOLUTION pH 10.00 COLOUR CODED (ORANGE) (pH 10.00 (±0.02/20 °C))

Specification

- Orange liquid
- Standardized against NIST reference material
- $Na_2B_4O_7$-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1130.1000

BUFFER SOLUTIONS, COLOUR CODED (25 °C)

BUFFER SOLUTION pH 4.00 COLOUR CODED (RED) (pH 4.00 (±0.01/25 °C))

Specification

- Red liquid
- Traceable to SRM from NIST
- $C_8H_5KO_4$

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1103.1000

BUFFER SOLUTION pH 7.00 COLOUR CODED (YELLOW) (pH 7.00 (±0.01/25 °C))

Specification

- Yellow liquid
- Traceable to SRM from NIST
- KH_2PO_4-Na_2HPO_4

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1135.1000

BUFFER SOLUTION pH 10.00 COLOUR CODED (BLUE) (pH 10.00 (±0.01/25 °C))

Specification

- Blue liquid
- Traceable to SRM from NIST
- $Na_2B_4O_7$ - NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1143.1000

BUFFER SOLUTIONS, COLOURLESS (20 °C)

BUFFER SOLUTION pH 1.00 (pH 1.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- KCl-HCl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1111.1000

BUFFER SOLUTION pH 2.00 (pH 2.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- Citrate-NaCl-HCl

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1112.1000

BUFFER SOLUTION pH 3.00 (pH 3.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- Citrate-NaCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1113.1000

BUFFER SOLUTION pH 4.00 (pH 4.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- Citrate-NaCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1114.1000
5 l	Polytainer	1114.5000

BUFFER SOLUTION pH 5.00 (pH 5.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- Citrate-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1115.1000

BUFFER SOLUTION pH 6.00 (pH 6.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- Citrate-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1116.1000

BUFFER SOLUTION pH 7.00 (pH 7.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- KH_2PO_4-Na_2HPO_4

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1117.1000
5 l	Polytainer	1117.5000

BUFFER SOLUTION pH 8.00 (pH 8.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1118.1000

BUFFER SOLUTION pH 9.00 (pH 9.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1119.1000
5 l	Polytainer	1119.5000

BUFFER SOLUTION pH 10.00 (pH 10.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1120.1000
5 l	Polytainer	1120.5000

BUFFER SOLUTION pH 11.00 (pH 11.00 (±0.02/20 °C))

Specification

- Traceable to SRM from NIST
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1121.1000

BUFFER SOLUTIONS, COLOURLESS (25 °C)

BUFFER SOLUTION pH 1.68 (pH 1.68 (±0.01/25 °C))

Specification

- Traceable to SRM from NIST
- $KH_3(C_2O_4)_2$

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1101.0500

BUFFER SOLUTION pH 4.00 (pH 4.00 (±0.01/25 °C))

Specification

- Traceable to SRM from NIST
- $C_8H_5KO_4$

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1122.0500

BUFFER SOLUTION pH 6.86 (pH 6.86 (±0.01/25 °C))

Specification

- Traceable to SRM from NIST
- KH_2PO_4-Na_2HPO_4

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1169.0500

BUFFER SOLUTION pH 7.00 (pH 7.00 (±0.01/25 °C))

Specification

- Traceable to SRM from NIST
- KH_2PO_4-Na_2HPO_4

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1139.0500

BUFFER SOLUTION pH 10.00 (pH 10.00 (±0.01/25 °C))

Specification

- Traceable to SRM from NIST
- $Na_2B_4O_7$-NaOH

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1151.0500

TECHNICAL BUFFER SOLUTIONS TWIN NECK BOTTLES, COLOUR CODED (25 °C)

TECH. BUFFER SOLUTION pH 2.00 COLOUR CODED (RED) (pH 2.00 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- Red liquid

Quantity	Packaging Material	Art. no.
1 l	Plastic twin neck bottle	1161.1012

TECH. BUFFER SOLUTION pH 4.01 COLOUR CODED (RED) (pH 4.01 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- Red liquid

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1165.0252
1 l	Plastic twin neck bottle	1165.1012

TECH. BUFFER SOLUTION pH 7.00 COLOUR CODED (YELLOW) (pH 7.00 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- Yellow liquid

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1167.0252
1 l	Plastic twin neck bottle	1167.1012

TECH. BUFFER SOLUTION pH 10.01 COLOUR CODED (BLUE) (pH 10.01 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- Blue liquid
- Na_2CO_3-$NaHCO_3$

Quantity	Packaging Material	Art. no.
250 ml	Plastic twin neck bottle	1173.0252
1 l	Plastic twin neck bottle	1173.1012

pH CALIBRATION KIT AND REFILL PACKS, COLOUR CODED (20 °C)

pH CALIBRATION KID COLOUR CODED pH 4.01 (RED), pH 7.01 (YELLOW) AND pH 10.01 (BLUE) (pH 4.01/pH 7.01/pH 10.01 (±0.01/20 °C))

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
each 2 x 30 ml	Cardbox	11111.001

REFILL PACK pH CALIBRATION pH 4.01 (RED), pH 7.01 (YELLOW) AND pH 10.01 (BLUE) (pH 4.01/pH 7.01/pH 10.01 (±0.01/20 °C))

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
each 2 x 30 ml	Vial	11100.001

REFILL PACK pH CALIBRATION PH 4.01 (RED) (pH 4.01 (±0.01/20 °C))

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
10 x 30 ml	Vial	11103.001

REFILL PACK PH CALIBRATION pH 7.01 (YELLOW) (pH 7.01 (±0.01/20 °C))

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
10 x 30 ml	Vial	11101.001

REFILL PACK PH CALIBRATION pH 10.01 (BLUE) (pH 10.01 (±0.01/20 °C))

Specification

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
10 x 30 ml	Vial	11102.001

BUFFER SOLUTIONS IN 30 ML SIDE SEALED POUCHES, COLOUR CODED (25 °C)

BUFFER SOLUTION pH 4.00 IN 30 ML SIDE SEALED POUCHES (RED) (pH 4.00 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- $C_8H_5KO_4$

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11400.0030

BUFFER SOLUTION pH 7.00 IN 30 ML SIDE SEALED POUCHES (GREEN) (pH 7.00 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- KH_2PO_4-Na_2HPO_4

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11700.0030

BUFFER SOLUTION pH 9.21 IN 30 ML SIDE SEALED POUCHES (BLUE) (pH 9.21 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- H_3BO_3-KCl-NaOH

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11921.0030

BUFFER SOLUTION pH 10.01 IN 30 ML SIDE SEALED POUCHES (BLUE) (pH 10.01 (±0.02/25 °C))

Specification

- Traceable to SRM from NIST
- Na_2CO_3-$NaHCO_3$

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11001.0030

BUFFER SOLUTIONS PH IN THE RAINBOW PACK pH 4.00 (RED), pH 7.00 (GREEN) AND pH 9.21 (BLUE) (pH 4.00/pH 7.00/pH 9.,21 (±0.02/25 °C))

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11000.0001

BUFFER SOLUTIONS pH IN THE RAINBOW PACK pH 4.00 (RED), pH 7.00 (GREEN) AND pH 10.01 (BLUE) (pH 4.00/pH 7.00/pH 10.01 (±0.02/25 °C))

- Traceable to SRM from NIST

Quantity	Packaging Material	Art. no.
30 x 30 ml	Side sealed pouch	11005.0001

BUFFER TABLETS, COLOUR CODED (20 °C)

BUFFER TABLETS pH 4 (PINK) (±0.05/20 °C)

Specification

- Reddish tablet

Quantity	Packaging Material	Art. no.
10 tablets	Blister	11040.0010
50 tablets	Blister	11040.0050
100 tablets	Blister	11040.0100

BUFFER TABLETS pH 7 (YELLOW) (±0.05/20 °C)

Specification

- Yellowish tablet

Quantity	Packaging Material	Art. no.
10 tablets	Blister	11070.0010
50 tablets	Blister	11070.0050
100 tablets	Blister	11070.0100

BUFFER TABLETS pH 10 (GREEN) (±0.05/20 °C)

Specification

- Green-yellowish tablet

Quantity	Packaging Material	Art. no.
10 tablets	Blister	11010.0010
50 tablets	Blister	11010.0050
100 tablets	Blister	11010.0100

pH INDICATOR STRIPS

pH INDICATOR, NON-BLEEDING (pH 0 – 14)

- pH steps 1.0

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2714.0001

pH INDICATOR, NON-BLEEDING (pH 0 – 14)

- pH steps 1.0

Quantity	Packaging Material	Art. no.
100 strips	Flip-top vial	2717.0001

pH INDICATOR, NON-BLEEDING (pH 0 – 6.0)

- pH steps 0.5

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2730.0001

pH INDICATOR, NON-BLEEDING (pH 7.0 – 14.0)

- pH steps 0.5

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2790.0001

pH INDICATOR, NON-BLEEDING (pH 4.5 – 10.0)

- pH steps 0.5

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2770.0001

pH INDICATOR, NON-BLEEDING (pH 4.0 – 7.0)

- pH steps 4.0 – 4.4 – 4.7 – 5.0 – 5.3 – 5.5 – 5.8 – 6.1 – 6.5 – 7.0

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2760.0001

pH INDICATOR, NON-BLEEDING (pH 2.0 – 9.0)

- pH steps 0.5

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2740.0001

pH INDICATOR PAPER, 7MM WIDTH, ON ROLL

pH UNIVERSAL INDICATOR (pH 1 – 11)

- pH steps 1.0

Quantity	Packaging Material	Art. no.
5 m	Plastic box	2811.0001
3 x 5 m		2811.0003

pH UNIVERSAL INDICATOR (pH 1 – 14)

- pH steps 1.0

Quantity	Packaging Material	Art. no.
5 m	Plastic box	2814.0001
3 x 5 m		2814.0003

TEST STRIPS FOR SEMI-QUANTITATIVE DETERMINATION

TOTAL HARDNESS TEST (3 – 4 – 7 – 14 – 21 °D)

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2915.0001

ASCORBIC ACID TEST (0 – 50 – 100 – 200 – 300 – 500 – 700 – 1000 – 2000 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Flip-top vial	2920.0001

PEROXIDE TEST (0 – 0.5 – 2 – 5 – 10 – 25 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2940.0001

PEROXIDE TEST (0 – 1 – 3 – 10 – 30 – 100 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2955.0001

NITRITE TEST (0 – 0.5 – 1 – 5 – 10 – 25 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Flip-top vial	2925.0001

NITRITE TEST (0 – 2 – 5 – 10 – 20 – 40 – 80 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2930.0001

NITRATE TEST (0 – 10 – 25 – 50 – 100 – 250 – 500 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Flip-top vial	2935.0001

PHOSPHATE TEST (0 – 3 – 10 – 25 – 50 – 100 – 250 – 500 MG/L)

Quantity	Packaging Material	Art. no.
100 strips	Plastic box	2950.0001

COMBINED TEST STRIPES 3 IN 1 – pH-FREE CHLORINE-ALKALINITY

- pH 6.4 – 6.8 – 7.2 – 7.6 – 8.4
- Free chlorine 0 – 0.5 – 1 – 3 – 5 – 10 mg/l
- Alkalinity 0 – 80 – 120 – 180 – 240 mg/l $CaCO_3$

Quantity	Packaging Material	Art. no.
50 strips	Flip-top vial	3090.0001

COMBINED TEST STRIPES 5 IN 1 – pH-FREE- AND TOTAL CHLORINE-ALKALINITY-TOTAL HARDNESS

- pH 6.4 – 6.8 – 7.2 – 7.6 – 8.4
- Free and total chlorine 0 – 0.5 – 1 – 3 – 5 – 10 mg/l
- Alkalinity 0 – 80 – 120 – 180 – 240 mg/l $CaCO_3$
- Total hardness 0 – 100 – 250 – 500 – 1000 mg/l $CaCO_3$

Quantity	Packaging Material	Art. no.
50 strips	Flip-top vial	3091.0001

ELECTRODE FILLING SOLUTIONS

ELECTRODE FILLING SOLUTION 1 MOL/L LITHIUM CHLORIDE, DISSOLVED IN ETHANOL

- UN-No. 1170
- ADR 3, II

GHS

- H225 H319
- P210 P280 P305+P351+P338 P337+P313 P501



Specification

- Lithium chloride (LiCl) 0.90 – 1.10 mol/l
- traceable to SRM of NIST

Quantity	Packaging Material	Art. no.
100 ml	Plastic bottle	2230.0100

POTASSIUM CHLORIDE 3 MOL/L – 3 N-SOLUTION, FREE OF SILVERIONS

Specification

- Potassium chloride (KCl) 2.90 – 3.10 mol/l
- traceable to SRM of NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1619.1000
5 l	Plastic canister	1619.5000

POTASSIUM CHLORIDE 3 MOL/L – 3 N-SOLUTION, SATURATED WITH AGCL

Specification

- Potassium chloride (KCl) 2.90 – 3.10 mol/l
- traceable to SRM of NIST

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	1633.1000

ELECTRODE FILLING SOLUTION 5 % KCL DISSOLVED OXYGEN ELECTROLYTE

Specification

- Potassium chloride (KCl) 4.75 – 5.25 %
- traceable to SRM of NIST

Quantity	Packaging Material	Art. no.
100 ml		2265.0100

ELECTRODE STORAGE SOLUTION

ELECTRODE STORAGE SOLUTION 2.9 – 3.1 MOL/L KCL

Specification

- Assay (KCl) 2.90 – 3.10 mol/l
- pH (20 °C) 3.9 – 4.1
- traceable to SRM of NIST

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	2239.0500
1 l	Plastic bottle	2239.1000

ELECTRODE CLEANING SOLUTIONS

CLEANING SOLUTION PEPSIN/HCL FOR REMOVING OF PROTEINS FROM ELECTRODES

GHS

- H334
- P260 P304+P340 P342+P311 P501



Specification

- Pepsin 0.9 – 1.1 %

Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2213.1000

CLEANING SOLUTION THIOUREA/HCL FOR REMOVING OF SILVER SULFIDE FROM ELECTRODES

GHS

- H290 H351 H361d H412
- P201 P273 P281 P308+P313 P390 P405 P501



Quantity	Packaging Material	Art. no.
1 l	Plastic bottle	2247.1000

CONDUCTIVITY STANDARD SOLUTIONS

CONDUCTIVITY STANDARD SOLUTION 5 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 5 µS/cm ±1 %
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1565.0500

CONDUCTIVITY STANDARD SOLUTION 84 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 83.16 – 84.84 µS/cm
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1570.0500

CONDUCTIVITY STANDARD SOLUTION 100 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 100 µS/cm ±1 %
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
250 ml	Plastic bottle	1571.0250

CONDUCTIVITY STANDARD SOLUTION 147 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 147 µS/cm ±1 %
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1572.0500

CONDUCTIVITY STANDARD SOLUTION 500 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 500 µS/cm ±1 %
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1573.0500

CONDUCTIVITY STANDARD SOLUTION 1413 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 1399 – 1427 µS/cm
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1575.0500
1 l	Plastic bottle	1575.1011

CONDUCTIVITY STANDARD SOLUTION 12880 µS/CM (25 °C)

Specification

- Conductivity (25 °C) 12751 – 13009 µS/cm
- Traceable to SRM from NIST
- Tested by an ISO 17025 Accredited Test Method.

Quantity	Packaging Material	Art. no.
500 ml	Plastic bottle	1580.0500

MICRO-BIOLOGICAL CULTURE MEDIA





BAIRD PARKER AGAR (BASE)

Solid selective culture medium for the screening of staphylococci from a variety of samples according to Pharmacopeial Harmonised Methods, FIL-IDF 60:2001, EP/USP, ISO 5944, ISO 6888, ISO 22718. standards.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Casein Peptone	10.0
Sodium pyruvate	10.0
Glycine	12.0
Meat extract	5.0
Lithium chloride	5.0
Yeast extract	1.0
Agar	17.0

Directions

Suspend 60 g of powder in 950 ml of distilled water.

Supplement

Egg Yolk Tellurite Emulsion 20 % (Art. no. 9557)

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9869.0500
2 kg	Plastic container	9869.2000
5 kg	Plastic container	9869.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 90 ml	Glass bottles 125 ml	9887.0090
10x 180 ml	Glass bottles 250 ml	9887.0180

BAIRD PARKER AGAR

Solid selective culture medium for the screening of staphylococci from a variety of samples according to Pharmacopeial Harmonised Methods, FIL-IDF 60:2001, EP/USP, ISO 5944, ISO 6888, ISO 22718. standards.

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9746.0020

BILE ESCULIN AZIDE AGAR

Solid medium for the confirmation and enumeration of enterococci in water by the membrane filtration method according to ISO 7899-2.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Tryptone	17.00
Peptone	3.00
Yeast extract	5.00
Bile	10.00
Sodium chloride	5.00
Esculin	1.00
Ammonium ferric citrate	0.50
Sodium azide	0.15
Agar	15.00

Final pH (25 °C) 7.1 ±0.1

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9423.0020
10x 100 ml	Glass bottles 125 ml	9425.0100

BLOOD AGAR (BASE)

Solid nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Meat extract	10.0
Tryptone	10.0
Sodium chloride	5.0
Agar	15.0

Directions

Suspend 40 g of powder in 950 ml of distilled water.



Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9850.0500



BRAIN HEART INFUSION BROTH (BHI BROTH)

Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens, DIN 10163, ISO 5944

DEHYDRATED CULTURE MEDIA

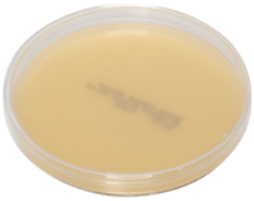
Formulation (g/l)	
Brain extract	12.50
Heart extract	5.00
Peptone	10.00
D(+)-Glucose (Dextrose)	2.00
Sodium chloride	5.00
Disodium phosphate	2.50

Directions

Dissolve 37 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9264.0500



BRILLIANT GREEN AGAR (BGA)

Medium for Salmonella isolation according to ISO 11133.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)	
Meat Peptone	5.0000
Casein Peptone	5.0000
Sodium chloride	5.0000
Yeast extract	3.0000
Lactose	10.0000
Sucrose	10.0000
Phenol Red	0.0800
Brilliant Green	0.0125
Agar	15.0000

Final pH (25 °C) 6.9 ±0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9489.0020

BRILLIANT GREEN BILE BROTH



Liquid medium used for the detection of coliforms in water according to APHA and ISO 4831, ISO 9308-1, ISO 11133.

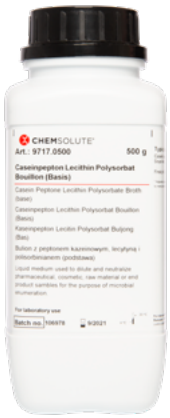
DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Bile	20.000	Suspend 40 g of powder in 1 l of distilled water.
Lactose	10.000	
Peptone	10.000	
Brilliant green	0.013	

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9835.0500

CASEIN PEPTONE LECITHIN POLYSORBATE BROTH (BASE)



Liquid medium used to dilute and neutralize pharmaceutical, cosmetic, raw material or end product samples for the purpose of microbial enumeration.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Casein peptone	20.0	Suspend 25 g of powder in 960 ml of distilled water.
Soy lecithin	5.0	

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9717.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9759.0009
10x 90 ml	Glass bottles 125 ml	9759.0090
10x 99 ml	Glass bottles 125 ml	9759.0099
10X 190 ml	Glass bottles 250 ml	9759.0190



CETRIMIDE AGAR PH. EUR.

Solid culture medium for the selective isolation of *Pseudomonas aeruginosa* according to Pharmacopeial Harmonised Methods and ISO 22717.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Gelatin peptone	20.00
Magnesium chloride	1.40
Potassium sulphate	10.00
Cetyltrimethylammoniumbromide	0.30
Agar	13.60

Directions

Suspend 45.3 g of powder in 1 l of distilled water.

Supplement

Glycerol (Art. no. 8110)

Final pH (25 °C) 7.2 ±0.2

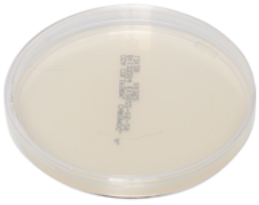
Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9783.0500
2 kg	Plastic container	9783.2000
5 kg	Plastic container	9783.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9248.0020
30 Plates	Contact plates 65 mm (doppelt wrapped)	9246.0030
30 Plates	Membrane filtration platesn 55 mm.	9254.0030
10x 100 ml	Glass bottles 125 ml	9682.0100
10x 200 ml	Glass bottles 250 ml	9682.0200

CHROMOGENIC COLIFORM AGAR (CCA)

Selective and differential medium for the detection and enumeration of coliforms and *E. coli* in water samples by membrane filtration. ISO 7704, ISO 9308-1.



READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Enzymatic digest of casein	1.00
Yeast extract	2.00
Sodium chloride	5.00
Di-sodium hydrogen phosphate	2.70
Sodium dihydrogen phosphatedihydrate	2.20
Tryptophan	1.00
Sodium pyruvate	1.00
Tergitol®7	0.15
Sorbitol	1.00
6-Chloro-3-indoxylß-D-galactopyranoside	0.20
5-Bromo-4-chlor-3-indoxyl-ß-D-glucuronic acid	0.10
IPTG	0.10
Agar	13.00

Final pH (25 °C) 6.8 ±0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9950.0020
30 Plates	Membrane filtration platesn 55 mm	9956.0030

COLUMBIA AGAR PH. EUR.



Highly nutritious general purpose medium used for the isolation and cultivation of fastidious and nonfastidious microorganisms from clinical and non-clinical materials according to Pharmacopeial Harmonised Methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Casein peptone	10.0
Meat peptone	5.0
Heart peptone	3.0
Yeast extract	5.0
Maize starch	1.0
Sodium chloride	5.0
Agar	15.0

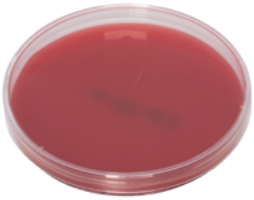
Directions

Suspend 44 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9770.0500
2 kg	Plastic container	9770.2000
5 kg	Plastic container	9770.5000

COLUMBIA AGAR WITH SHEEP BLOOD



Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens. ISO 10272-1, ISO 10272-2.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Casein peptone	10.00
Meat peptic digest	5.00
Heart Pancreatic digest	3.00
Yeast Extract	5.00
Sodium chloride	5.00
Starch	1.00
Agar	15.00
Defibrinated sheep blood	50.0 ml

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9772.0020



DG 18 AGAR (DICHLORAN GLYCEROL CHLORAMPHENICOL AGAR) (BASE)

Solid differential and low water activity medium used for the determination of xerophilic fungi in low moisture food and indoor according to ISO standard 16000-17 and ISO 21527-2

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Peptone	5.000
D(+)-Glucose (Dextrose)	10.000
Potassium dihydrogenphosphate	1.000
Magnesium sulphate heptahydrate	0.500
Dichloran	0.002
Chloramphenicol	0.100
Agar	15.000

Directions

Suspend 31.7 g of powder in 1 l of distilled water.

Supplement

Glycerol (Art. no. 8110)

Final pH (25 °C) 5.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9685.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9526.0020
10x 100 ml	Glass bottles 125 ml	9793.0100



DRBC AGAR (DICHLORAN ROSE BENGAL CHLORAMPHENICOL AGAR)

Selective medium for the enumeration of mold and yeast in foodstuff according to ISO 21527-1.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Mycological peptone	5.000
D(+)-Glucose (Dextrose)	10.000
Potassium dihydrogenphosphate	1.000
Magnesium sulphate	0.500
Dichloran	0.002
Rose bengal	0.025
Chloramphenicol	0.100
Agar	15.000

Directions

Suspend 31.6 g of powder in 1 l of distilled water.

Final pH (25 °C) 5.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9677.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9627.0020

ENTEROBACTERIACEAE ENRICHMENT BROTH MOSSEL (EE BROTH)



Liquid culture medium used for the enrichment of enterobacteria according to Pharmacopeial Harmonised Methods and ISO 21528-1.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Gelatin peptone	10.000
D(+)-Glucose (Dextrose)	5.000
Ox bile	20.000
Disodium phosphate dihydrate	8.000
Potassium dihydrogenphosphate	2.000
Brilliant green	0.0135

Directions

Suspend 45 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9571.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes	9440.0009
10x 90 ml	Flaschen	9440.0090
10x 100 ml	Flaschen	9440.0100

FLUID A

Rinsing and diluting fluid for membrane filtration methods. EP/USP

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Peptic digest of animal tissue	1.00

Final pH (25 °C) 7.1 ±0.2

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9030.0009
10x 100 ml	Glass bottles 125 ml	9030.0100
10x 300 ml	Glass bottles 500 ml	9030.0300
10x 450 ml	Glass bottles 500 ml	9030.0450
6x 600 ml	Glass bottles 1 l	9030.0600
6x 900 ml	Glass bottles 1 l	9030.0900

FLUID D

Rinsing and diluting fluid for membrane filtration methods. EP/USP

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Meat peptone	1.0
Polysorbate 80	1.0

Final pH (25 °C) 7.1 ±0.2

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottles 125 ml	9032.0100
10x 300 ml	Glass bottles 500 ml	9032.0300
10x 400 ml	Glass bottles 500 ml	9032.0400
6x 600 ml	Glass bottles 1 l	9032.0600
6x 850 ml	Glass bottles 1 l	9032.0850

FLUID K

Diluent and non-selective pre-enrichment medium for homogenization of samples for microbiological examination. EP/USP

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Meat Peptone	5.00
Beef extract	3.00
Polysorbate 80	10.00

Final pH (25 °C) 6.9 ±0.2

Quantity	Packaging Material	Art. no.
10x 300 ml	Glass bottles 500 ml	9036.0300
10x 450 ml	Glass bottles 500 ml	9036.0450

FRASER BROTH



Liquid culture medium for the enrichment and detection of *Listeria spp.*

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Soy peptone	5.00
Tryptone	5.00
Meat extract	5.00
Yeast extract	5.00
Sodium chloride	20.00
Esculin	1.00
Disodium phosphate	9.60
Potassium dihydrogen phosphate	1.35
Lithium chloride	3.00

Directions

Dissolve 49.25 g of powder in 1 l of distilled water.

Supplement

Fraser Listeria Selective Supplement (Art. no. 9442)
Half Fraser Listeria Selective Supplement (Art. no. 9250)

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9439.0500
2 kg	Plastic bottle	9439.2000
5 kg	Plastic bottle	9439.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 10 ml	Tubes 16 x 113 mm	9650.0010
10x 225 ml	Glass bottles 250 ml	9650.0225

HALF FRASER BROTH ISO

Broth for the selctive enrichment of *Listeria spp.*, ISO 11290.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Meat peptone	5.0000
Casein peptone	5.0000
Yeast extract	5.0000
Meat extract	5.0000
Sodium chloride	20.0000
Disodium phosphate	12.0000
Monopotassium phosphate	1.3500
Esculin	1.0000
Lithium chloride	3.0000
Ammonium ironIII citrate	0.5000
Nalidixic ac	0.0100
Acriflavine	0.0125



Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9654.0009
10x 225 ml	Glass bottles 250 ml	9654.0225
5x 2 l	Bags	9653.2000
3x 3 l	Bags	9653.3000
2x 5 l	Bags	9653.5000



KANAMYCIN ESCULIN AZIDE AGAR

Solid medium for confirmative detection and isolation of Lancefield's group D streptococci in food samples according to Mossel et al.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Tryptone	20.00
Yeast extract	5.00
Sodium chloride	5.00
Disodium citrate	1.00
Esculin	1.00
Ferric-ammonium citrate	0.50
Sodium azide	0.15
Kanamycin sulfate	0.02
Agar	15.00

Directions

Suspend 48 g of powder in 1 l of distilled water.

GHS

- H302-H412
- P261-P273-P280-P301+P330+P331-P308+P311-P501

Warning

Final pH (25 °C) 7.0 ± 0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8536.0500
2 kg	Plastic container	8536.2000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 200 ml	Glass bottle 250 ml	9842.0200

LACTOSE BROTH



Medium for pre-enrichment and detection of enterobacteria and coliforms in milk and water according to ISO 9308-2, ISO 21150:2006, APHA and USP.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Gelatin peptone	5.0
Meat extract	3.0
Lactose	5.0

Directions

Suspend 13 g of powder in 1 l of distilled water.

Final pH (25 °C) 6.9 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8620.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 90 ml	Glass bottles 125 ml	9487.0090
10x 100 ml	Glass bottles 125 ml	9487.0100

LACTOSE BROTH DEV



Liquid medium for the enrichment and detection of coliforms in water according to German standard methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Meat peptone	10.00	Dissolve 28 g of powder in 1 l of distilled water.
Meat extract	3.00	
Sodium chloride	5.00	
Lactose	10.00	
Bromocresol purple	0.02	

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8869.0500

LAURYL SULPHATE BROTH



Liquid medium used for the detection and enumeration of coliform bacteria according to IDF-FIL 73B and ISO standards.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptose	20.00	Dissolve 35.6 g of powder in 1 l of distilled water.
Sodium lauryl sulphate	0.10	
Lactose	5.00	
Dipotassium phosphate	2.75	
Potassium dihydrogen phosphate	2.75	
Sodium chloride	5.00	

Final pH (25 °C) 6.8 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8848.0500



LB AGAR ACC. TO LENNOX

Standard agar based on LB broth acc. to Lennox, with low salt content (5 g/l NaCl). Ideal for general purposes and especially for growing and maintaining recombinant *Escherichia coli* strains.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptone	10.0	Suspend 35 g of powder in 1 l of distilled water.
Yeast extract	5.0	
Sodium chloride	5.0	
Agar	15.0	

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8876.0500
2 kg	Plastic container	8876.2000
5 kg	Plastic container	8876.5000



LB AGAR ACC. TO MILLER

Standard agar based on LB broth acc. to Miller. Ideal for general purposes and especially for growing and maintaining *Escherichia coli* strains used in molecular microbiology procedures.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptone	10.0	Suspend 40 g of powder in 1 l of distilled water.
Yeast extract	5.0	
Sodium chloride	10.0	
Agar	15.0	

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8843.0500
2 kg	Plastic container	8843.2000
5 kg	Plastic container	8843.5000

LB BROTH ACC. TO LENNOX



Standard medium with low salt content (5 g/l NaCl), ideal for general purposes and the cultivation of recombinant *Escherichia coli* strains.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptone	10.0	Suspend 20 g of powder in 1 l of distilled water.
Yeast extract	5.0	
Sodium chloride	5.0	

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8891.0500
2 kg	Plastic container	8891.2000
5 kg	Plastic container	8891.5000

LB BROTH ACC. TO MILLER



Standard medium for general purposes and especially for the cultivation of *Escherichia coli*, high-salt content (10 g/l NaCl).

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptone	10.0	Suspend 25 g of powder in 1 l of distilled water.
Yeast extract	5.0	
Sodium chloride	10.0	

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8822.0500
2 kg	Plastic container	8822.2000
5 kg	Plastic container	8822.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottles 125 ml	9360.0100



LEGIONELLA BCYE AGAR (BASIS)

Solid medium used for the detection, isolation and enumeration of Legionella from water according to ISO standard 11731:1998 and 11731-2:2004.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Activated charcoal	2.0
Yeast extract	10.0
Agar	15.0

Final pH (25 °C) 6.8 ±0.2

Directions

Suspend 13.5 g of powder in 500 ml of distilled water.

Supplement

Legionella BCYE Growth Supplement (Art. no. 8861)
Legionella GVPC Selective Supplement (Art. no. 8820)

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8811.0500
2 kg	Plastic container	8811.2000
5 kg	Plastic container	8811.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9664.0020



LISTERIA SELECTIVE AGAR BASE ACCORDING TO OTTAVIANI AND AGOSTI (ALOA) ISO

Medium for the isolation of *Listeria spp.* and the presumptive identification of *L. monocytogenes acc.* to ISO 11290-1 and 11290-2 standard.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Meat peptone	18.00
Tryptone	6.00
Yeast extract	10.00
Sodium pyruvate	2.00
D(+)-Glucose (Dextrose)	2.00
Magnesium glycerophosphate	1.00
Magnesium sulphate	0.50
Sodium chloride	5.00
Lithium chloride	10.00
Disodium phosphate anhydrous	2.50
5-Bromo-4-chloro-3-indolyl-ß-D-glucopyranoside	0.05
Agar	12.00

Final pH (25 °C) 7.2 ± 0.2

Directions

Suspend 35 g of powder in 476 ml of distilled water. After sterilisation and cooling, add 1 vial of Listeria Enrichment supplement and 1 vial of Listeria Selective supplement.

Supplement

Listeria Enrichment supplement (Art. no. 8815)
Listeria Selective supplement (Art. no. 8814)

GHS

- H315 H319
- P280-P301+P330+P331-P302+P352-P305+P51+P338

Warning



Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8813.0500
2 kg	Plastic container	8813.2000
5 kg	Plastic container	8813.5000

LYSINEMEDIUM

Solid and differential medium for the isolation, cultivation and enumeration of wild yeast in the brewery industry.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Agar	17.80000
Lysine	1.00000
Potassium dihydrogen phosphate	1.78000
Magnesium sulfate	0.89000
Calcium chloride	0.17800
Sodium chloride	0.08900
Inositol	0.02000
Supplement	0.00815
H3BO3	8.9µg
Biotin	2.0µg
Folic ac	1.0µg
Potassium lactate 50% Sol.	10.0 ml
Lactic ac 10%	1.0 ml

Final pH (25 °C) 4.8 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9370.0020
10x 100 ml	Glass bottles 125 ml	9535.0100

M17 AGAR

Solid selective medium for the enumeration of *Streptococcus thermophilus* in yoghurt samples.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Tryptone	2.50
Meat peptone	2.50
Soy peptone	5.00
Yeast extract	2.50
Meat extract	5.00
Sodium ß-glycerophosphate	19.00
magnesium sulfate	0,25
ascorbic acid	0,50
lactose	5,00
Agar	15.00

Final pH (25 °C) 6.8 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9840.0020
10x 100 ml	Glass bottles 125 ml	9838.0100
10x 200 ml	Glass bottles 250 ml	9838.0200



MACCONKEY AGAR PH. EUR.

Solid selective and differential medium used in the detection, isolation and enumeration of Salmonella and coliforms in clinical specimens according to Pharmacopeial Harmonised Methods and in foodstuff specimens according to ISO 21150.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Gelatin pepton	17.000
Meat peptone	1.500
Casein peptone	1.500
Lactose monohydrate	10.000
Bile salts	1.500
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.001
Agar	15.000

Directions

Suspend 51.5 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.1 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8796.0500
2 kg	Plastic container	8796.2000
5 kg	Plastic container	8796.5000

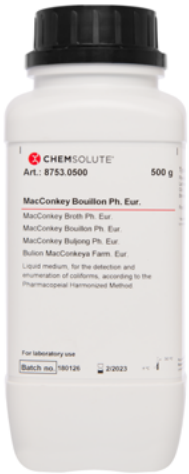


READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9452.0020
30 Plates	Contact plates 65 mm	9456.0030
10x100 ml	Glass bottle 125 ml	9450.0100

MACCONKEY BROTH PH. EUR.

Liquid medium for the detection and enumeration of coliforms according to Pharmacopeial Harmonised Methods.



DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Gelatin pepton	20.00
Lactose monohydrate	10.00
Ox bile	5.00
Bromocresol purple	0.01

Directions

Dissolve 35 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8753.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottle 125 ml	9446.0100

MALT EXTRACT AGAR



Solid medium for the isolation and enumeration of fungi to ISO 16212.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Malt extract	30.0	Suspend 48 g of powder in 1 l of distilled water.
Soy peptone	3.0	
Agar	15.0	

Final pH (25 °C) 5.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8287.0500
2 kg	Plastic container	8287.2000
5 kg	Plastic container	8287.5000

READY-TO-USE CULTURE MEDIA



Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9980.0020
30 Plates	Contact plates (double wrapped)	9982.0030
10x 100 ml	Glass bottles 125 ml	9270.0100
10x 200 ml	Glass bottles 250 ml	9270.0200

MALT EXTRACT BROTH



Liquid medium for the cultivation of yeast and mold.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Malt extract	17.0	Dissolve 17 g of powder in 1 l of distilled water.

Final pH (25 °C) 4.8 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8764.0500



MANNITOL SALT AGAR (CHAPMAN AGAR)

Solid selective medium for the isolation of pathogenic staphylococci according to Pharmacopeial Harmonised Methods and ISO 22718.

DEHYDRATED CULTURE MEDIA

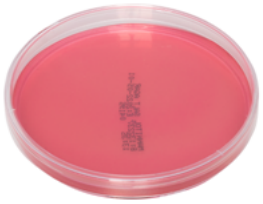
Formulation (g/l)	
Beef extract	1.000
Pancreatic digest of casein	5.000
Peptic digest of meat	5.000
Sodium chloride	75.000
D-Mannitol	10.000
Phenol red	0.025
Agar	15.000

Directions

Suspend 111 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8743.0500



READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9156.0020

MAXIMUM RECOVERY DILUENT

Isotonic diluent for the maximal recovery of stressed microorganisms according to ISO standards.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Pancreatic digest of casein (Tryptone)	1.00
Sodium chloride	8.50

Directions

Dissolve 9.5 g of powder in 1 l of distilled water and distribute into suitable containers.

Final pH (25 °C) 7.0 ±0.2



Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8485.0500
5 kg	Plastic container	8485.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9469.0009
10x 100 ml	Glass bottles 125 ml	9472.0100
3x 3 l	Bags	9099.3000
2x 5 l	Bags	9099.5000

MRS AGAR ISO



Solid medium for the culture of lactic acid bacteria according to deMan, Rogosa and Sharpe, modified according to ISO standards and IFU methods. ISO 9232, ISO 15214, ISO 20128.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Enzymatic digest of casein	10.00
Meat extract	10.00
Yeast extract	4.00
D(+)-Glucose (Dextrose)	20.00
Sodium acetate	5.00
Triammonium citrate	2.00
Magnesium sulphate heptahydrate	0.20
Manganese sulphate tetrahydrate	0.05
Dipotassium phosphate	2.00
Polysorbate 80	1.08
Agar	14.00

Directions

Suspend 68.3 g of powder in 1 l of distilled water.

Final pH (25 °C) 5.7 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8761.0500
2 kg	Plastic container	8761.2000
5 kg	Plastic container	8761.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 200 ml	Glass bottles 250 ml	9379.0200

MRS AGAR

Prepared plates. Solid culture medium for detection, isolation and cultivation of lactobacilli and other lactic acid bacteria from food and beverages according to de Man, Rogosa and Sharpe.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)	
Proteose-Peptone	10.00
Meat extract	8.00
Yeast extract	4.00
D-(+)-Glucose (Dextrose)	20.00
Sodium acetate	5.00
Magnesium sulfate	0.20
Manganese sulfate	0.05
Dipotassium phosphate	2.00
Triamonium citrate	2.00
Polysorbate 80	1.00
Agar	14.00

Final pH (25 °C) 5.7 ±0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9384.0020



MRS BROTH

Liquid culture medium for the isolation of lactobacilli according to deMan, Rogosa and Sharpe.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Peptone proteose	10.00
Meat extract	8.00
Yeast extract	4.00
D(+)-Glucose (Dextrose)	20.00
Sodium acetate	5.00
Triammonium citrate	2.00
Magnesium sulphate	0.20
Manganese sulphate	0.05
Dipotassium phosphate	2.00
Polysorbate 80	1.00

Final pH (25 °C) 6.2 ±0.2

Directions

Suspend 52 g of powder in 1 l of distilled water.

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8733.0500
2 kg	Plastic container	8733.2000
5 kg	Plastic container	8733.5000

MYP AGAR (MANNITOL EGG YOLK POLYMYXIN AGAR)



Selective solid medium according to Mossel for the isolation and identification of *Bacillus cereus* from food samples according to ISO 7932, and ISO 21871.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Peptone	10.000
Mannitol	10.000
Sodium chloride	10.000
Meat extract	1.000
Phenol red	0.025
Agar	15.000

Final pH (25 °C) 7.2 ±0.2

Directions

Suspend 46 g of powder in 900 ml of distilled water.

Supplement

Egg Yolk Emulsion 20 %
(Art. no. 9578)
Polymyxin B Selective Supplement
(Art. no. 8477)

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8710.0500
2 kg	Plastic container	8710.2000
5 kg	Plastic container	8710.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9371.0020

NUTRIENT AGAR APHA, ISO



Solid culture medium for general purpose use according to ISO 6579-1, ISO 6785, ISO 10273, and APHA.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Peptone	5.0	Suspend 23 g of powder in 1 l of distilled water.
Meat extract	3.0	
Agar	15.0	

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8657.0500

NUTRIENT AGAR DEV



Solid general purpose medium according to German regulation for food and water samples.DIN 38411-6.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Meat extract	10.0	Suspend 43 g of powder in 1 l of distilled water.
Meat peptone	10.0	
Sodium chloride	5.0	
Agar	18.0	

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9643.0500
2 kg	Plastic container	9643.2000
5 kg	Plastic container	9643.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9394.0020
10x 200 ml	Glass bottles 250 ml	9396.0200
10x 450 ml	Glass bottles 500 ml	9396.0450
20x 15 ml	Tubles 17x 145 mm	9396.0015



NUTRIENT AGAR ISO

Solid culture medium for general purpose use with less fastidious organisms according to ISO 8914, ISO 16266.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Meat extract	1.0
Yeast extract	2.0
Peptone	5.0
Sodium chloride	5.0
Agar	15.0

Final pH (25 °C) 7.4 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9390.0020
10x 100 ml	Glass bottles 125 ml	9373.0100



ORANGE SERUM AGAR

Solid medium for the culture of aciduric organisms especially those associated with the spoilage of citrus products and their derivatives.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Tryptone	10.0
Yeast extract	3.0
Orange serum	5.0
D(+)-Glucose (Dextrose)	4.0
Dipotassium phosphate	3.0
Agar	17.0

Directions

Suspend 42 g of powder in 1 l of distilled water.

Final pH (25 °C) 5.5 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8546.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9591.0020
20x 20 ml	Tubes 16 x 113 mm	9595.0020
10x 200 ml	Glass bottles 250 ml	9595.0200

OXFORD LISTERIA AGAR (BASE)



Solid selective and differential medium for the detection, enumeration and isolation of *Listeria spp.* according to ISO standards 11290-1 and 11290-2.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Tryptone	10.00
Lithium chloride	15.00
Proteose peptone	10.00
Sodium chloride	5.00
Yeast extract	3.00
Starch	1.00
Esculin	1.00
Ammonium iron(III) citrate	0.50
Agar	13.00

Final pH (25 °C) 7.0 ±0.2

Directions

Suspend 58.5 g of powder in 1 l of distilled water.

Supplement

Oxford Agar Selective Supplement (Art. no. 9594)

GHS

- H315-H319
- P280-P302+P352-P305+P351+P338

Warning

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8519.0500

PALCAM LISTERIA AGAR (BASE)

Solid selective and differential medium for the detection, enumeration and isolation of *Listeria spp.* according to ISO standards 11290-1 and 11290-2.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Tryptone	23.00
Lithium chloride	15.00
Mannitol	10.00
Sodium chloride	5.00
Yeast extract	3.00
Starch	1.00
Esculin	0.80
Ammonium iron(III) citrate	0.50
D(+)-Glucose (Dextrose)	0.50
Phenol red	0.08
Agar	13.00

Final pH (25 °C) 7.2 ±0.2

Directions

Suspend 72 g of powder in 1 l of distilled water.

Supplement

Palcam Listeria Agar Selective Supplement (Art. no. 8439)

GHS

- H315-H319
- P280-P302+P352-P305+P351+P338

Warning

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8429.0500
2 kg	Plastic container	8429.2000



PEPTONE WATER, BUFFERED ISO

Liquid medium for dilution and non-selective pre-enrichment from food samples according to ISO 579-1, ISO 6785, ISO 6887, ISO 8261

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Bacteriological peptone	10.00
Sodium chloride	5.00
Disodium hydrogen phosphate (anhydrous)	3.50*
Potassium phosphate	1.50

Final pH (25 °C) 7.0 ±0.2

* Equivalent to 9.0 g of disodium hydrogen phosphate dodecahydrate

Directions

Dissolve 20 g of powder in 1 l of distilled water.

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8449.0500
2 kg	Plastic container	8449.2000
5 kg	Plastic container	8449.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9230.0009
10x 90 ml	Glass bottles 125 ml	9230.0090
10x 100 ml	Glass bottles 125 ml	9230.0100
10x 200 ml	Glass bottles 250 ml	9230.0200
10x 225 ml	Glass bottles 250 ml	9230.0225
6x 800 ml	Glass bottles 1 l	9230.0800
5x 2 l	Bags	9240.2000
3x 3 l	Bags	9240.3000
2x 5 l	Bags	9240.5000

PEPTONE WATER, BUFFERED PH. EUR.



Diluent for the homogenization of samples for the microbiological examination according to the European Pharmacopeial Harmonised Method and ISO standards ISO 16212, ISO 21149, ISO 21150, 22717, ISO 22718.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Peptone	1.00
Sodium chloride	4.30
Disodium phosphate (anhydrous)	5.77*
Potassium dihydrogen phosphate	3.60

Final pH (25 °C) 7.0 ±0.2

* Equivalent to 7.23 g of disodium hydrogen phosphate dihydrate.

Directions

Dissolve 14.67 g of powder in 1 l of distilled water, heat if necessary. Add 1 to 10 ml of Polysorbate 80 or Polysorbate 20 depending on the type of food or product to be diluted.

Supplement

Tween® 20 (Art. no. 8022), Polysorbate 80

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8644.0500
2 kg	Plastic container	8644.2000
5 kg	Plastic container	8644.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	8682.0009
20x 10 ml	Tubes 16 x 113 mm	8682.0010
10x 90 ml	Glass bottles 125 ml	8682.0090
10x 100 ml	Glass bottles 125 ml	8682.0100
10x 200 ml	Glass bottles 250 ml	8682.0200
10x 225 ml	Glass bottles 250 ml	8682.0225
10x 300 ml	Glass bottles 500 ml	8682.0300
10x 450 ml	Glass bottles 500 ml	8682.0450
6x 800 ml	Glass bottles 1 l	8682.0800
6x 900 ml	Glass bottles 1 l	8682.0900



PLATE COUNT AGAR (PCA)

Medium for aerobic plate counts by the surface inoculation method according to ISO 4833, ISO 8552 and ISO 17410 and IFU No. 6.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Casein peptone	5.00	Suspend 23.5 g of powder in 1 l of distilled water.
Yeast extract	2.50	
D(+)-Glucose (Dextrose)	1.00	
Agar	15.00	

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8425.0500
2 kg	Plastic container	8425.2000
5 kg	Plastic container	8425.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9585.0020
30 Plates	Contact plates 65 mm	9577.0030
10x 100 ml	Glass bottles 125 ml	9310.0100
10x 200 ml	Glass bottles 250 ml	9310.0200
10x 450 ml	Glass bottles 500 ml	9310.0450



PLATE COUNT SKIM MILK AGAR (PCA)

Solid medium for the plate count of milk and dairy products according to DIN and FIL-IDF standards.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Tryptone	5.00	Suspend 20 g of powder in 1 l of distilled water.
Yeast extract	2.50	
Skim milk	1.00	
D(+)-Glucose (Dextrose)	1.00	
Agar	10.50	

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8459.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottles 125 ml	9480.0100
10x 200 ml	Glass bottles 250 ml	9480.0200
10x 450 ml	Glass bottles 500 ml	9480.0450

POTATO DEXTROSE AGAR PH. EUR.



Solid culture medium for the detection and enumeration of yeast and mold in foodstuff, especially recommended for dairy products and other samples according to Pharmacopeial Harmonised Methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Potato peptone	4.0*
D(+)-Glucose (Dextrose)	20.0
Agar	15.0

Final pH (25 °C) 5.6 ±0.2

* Equivalent to 200 g infusion from potatoes .

Directions

Suspend 39 g of powder in 1 l of distilled water.

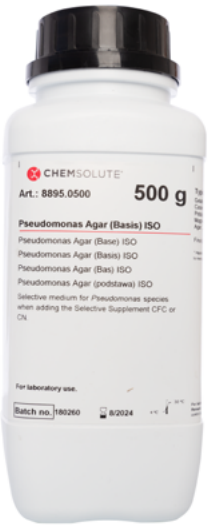
Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8992.0500
2 kg	Plastic container	8992.2000
5 kg	Plastic container	8992.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 200 ml	Glass bottles 250 ml	9367.0200

PSEUDOMONAS AGAR ISO

Selective medium for *Pseudomonas* species when adding the selective supplement CFC or CN.



DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Gelatine peptone	16.00
Casein peptone	10.00
Potassium sulfate	10.00
Magnesium chloride	1.40
Agar	14.00

Final pH (25 °C) 7.2 ± 0.2

Directions

Dissolve 51.4 g of powder in 1 l of distilled water with 10 ml Glycerol (Art. no. 8110). After sterilisation and cooling, add 2 flasks of either CFC or CN selective supplement.

Supplement

CFC selective supplement (Art. no. 8897)
CN selective supplement (Art. no. 8898)

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8895.0500
2 kg	Plastic container	8895.2000
5 kg	Plastic container	8895.5000



R2A AGAR PH. EUR.

Solid medium for the enumeration of heterotrophic microorganisms in treated waters according to Pharmacopeial Harmonised Methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Proteose peptone	0.500
Casein hydrolysate (Tryptone)	0.500
Yeast extract	0.500
D(+)-Glucose (Dextrose)	0.500
Starch	0.500
Sodium pyruvate	0.300
Dipotassium phosphate	0.300
Magnesium sulphate (anhydrous)	0.024
Agar	15.000

Directions

Suspend 18.1 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8267.0500
2 kg	Plastic container	8267.2000
5 kg	Plastic container	8267.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm (double wrapped)	9160.0020
30 Plates	Membrane filtration platesn 55 mm	9161.0030
10x 100 ml	Glass bottles 125 ml	9177.0100

RAPPAPORT VASSILIADIS BROTH



Liquid medium for the selective enrichment of Salmonella in foodstuff and other samples, according to ISO 6579-1, and ISO 6785:2001 and FIL-IDF.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Soy peptone	4.500
Sodium chloride	7.200
Potassium dihydrogen phosphate	1.260
Dipotassium phosphate	0.180
Magnesium chloride (anhydrous)	13.400
Malachite green	0.036

Directions

Suspend 26.8 g of powder in 1 l of distilled water.

Final pH (25 °C) 5.2 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8229.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 10 ml	Tubes 16 x 113 mm	9658.0010
10x 90 ml	Glass bottles 125 ml	9658.0090

REINFORCED CLOSTRIDIAL MEDIUM (RCM) PH. EUR.



Liquid medium for the cultivation and enumeration of Clostridia by the MPN technique according to Pharmacopoeial Harmonised Methods and ISO 10705-4.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Casein peptone	10.00
Yeast extract	3.00
Meat extract	10.00
D(+)-Glucose (Dextrose)	5.00
Sodium chloride	5.00
Sodium acetate	3.00
Soluble starch	1.00
Cysteine	0.50
Agar	0.50

Directions

Suspend 38 g of powder in 1 l of distilled water.

Final pH (25 °C) 6.8 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9749.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottles 125 ml	9679.0100



SABOURAUD 2 % GLUCOSE BROTH PH. EUR.

Liquid medium for isolation of fungi according to harmonized pharmacopoeia methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
Casein peptone	5.0	Dissolve 30 g of powder in 1 l of distilled water.
Meat peptone	5.0	
D(+)-Glucose (Dextrose)	20.0	

Final pH (25 °C) 5.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8159.0500



SABOURAUD 4 % DEXTROSE AGAR PH. EUR.

Solid medium for the cultivation and enumeration of yeast and fungi according to Pharmacopeial Harmonised Methods and ISO 16212.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)		Directions
D(+)-Glucose (Dextrose)	40.0	Suspend 65 g of powder in 1 l of distilled water.
Meat peptone	5.0	
Casein peptone	5.0	
Agar	15.0	

Final pH (25 °C) 5.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8135.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9780.0020
20 Plates	Prepared plates 90 mm (double wrapped)	9786.0020
20 Plates	Prepared plates 90 mm (triple veroackt)	9797.0020
10x 100 ml	Glass bottles 125 ml	9674.0100
10x 200 ml	Glass bottles 250 ml	9674.0200
10x 400 ml	Glass bottles 500 ml	9674.0400
10x 450 ml	Glass bottles 500 ml	9674.0450
20x 6,2 ml	SchrägagarTubes	9162.0006

SABOURAUD 4% DEXTROSE CHLORAMPHENICOL AGAR

Solid medium for the enumeration and cultivation of fungi. Ph. Eur., USP, ISO 16212

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

D(+)-Glucose (Dextrose)	40.00
Casein petone	5.00
Meat peptone	5.00
Agar	15.00
Chloramphenico	l 0.05

Finaler pH (25 °C) 5,6 ±0,2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9166.0020
20 Plates	Prepared plates 90 mm (double wrapped, bestrahlt)	9170.0020
20 Plates	Prepared plates 90 mm (triple wrapped)	9164.0020
30 Plates	Contact plates (double wrapped)	9225.0030
24 Plates	Contact plates 65 mm (triple wrapped)	9858.0024
10x 100 ml	Glass bottles 125 ml	9675.0100
10x 200 ml	Glass bottles 250 ml	9675.0200
10x 475 ml	Glass bottles 500 ml	9675.0475



SABOURAUD DEXTROSE AGAR WITH TLHTH AS DISINHIBITORS/ NEUTRALISERS (HISTIDIN, LECITHIN, POLYSORBAT 80, NATRIUMTHIOSULFAT)

Solid medium for the enumeration and cultivation of fungi. Ph. Eur. USP, ISO 16212

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

D(+)-Glucose (Dextrose)	40.0
Casein peptone	5.0
Meat Peptone	5.0
Lecithine	0.7
Polysorbate 80	5.0
Histidin	1.0
Sodium thiosulphate $5H_2O$	0.5
Agar	15.0

Final pH (25 °C) 5.6 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm (double wrapped)	9781.0020
30 Plates	Contact plates 65 mm (double wrapped)	8161.0030





SLANETZ AND BARTLEY AGAR

Solid differential and selective medium for the detection and enumeration of enterococci according to ISO 7899-2.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Tryptose	20.00
Yeast extract	5.00
D(+)-Glucose (Dextrose)	2.00
Dipotassium phosphate	4.00
Sodium azide	0.40
Agar	12.00

Directions

Suspend 43.4 g of powder in 1 l of distilled water.

Supplement

TTC solution 1 %, sterile (Art. no. 8055)

Final pH (25 °C) 7.2 ±0.1

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8174.0500
2 kg	Plastic container	8174.2000
5 kg	Plastic container	8174.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9132.0020
30 Plates	Membrane filtration platesn 55 mm	9134.0030

STANDARD 1 NUTRIENT AGAR

Standard 1 Nutrient Agar, DIN 38411.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Casein peptone	15.0
Yeast extract	3.0
Sodium chloride	6.0
D(+)-Glucose (Dextrose)	1.0
Agar	15.0

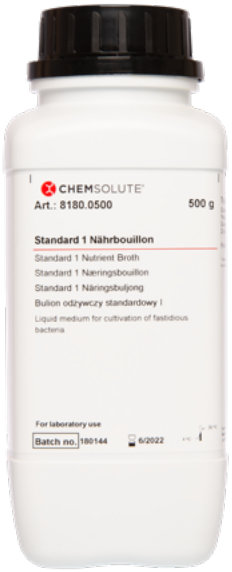
Directions

Suspend 40 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.5 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8152.0500

STANDARD 1 NUTRIENT BROTH



Liquid medium for cultivation of fastidious bacteria.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Casein peptone	15.0
Yeast extract	3.0
Sodium chloride	6.0
D(+)-Glucose (Dextrose)	1.0

Directions

Suspend 25 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.5 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8180.0500

TERGITOL® 7-LACTOSE-TTC AGAR

Medium for the detection of coliforms by membrane filtration in water analyses. ISO 9308.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Meat peptone	10.000
Meat extract	5.000
Lactose	20.000
Yeast extract	6.000
Bromothymol blue	0.050
Tergitol® 7	0.100
Agar	15.000
TTC sterile solution 1%	2.5 ml

Finaler pH (25 °C) 7.2 ±0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9291.0020
30 Plates	Membrane filtration platesn 65 mm	9293.0030



TERRIFIC BROTH

Nutrient rich media for the cultivation of recombinant *Escherichia coli* strains, with Glycerol.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Yeast extract	24.00
Tryptone	12.00
Dipotassium phosphate	9.40
Potassium dihydrogen phosphate	2.20

Final pH (25 °C) 7.2 ±0.2

Directions

Dissolve 47.6 g of powder in 1 l of distilled water.

Supplement:

Glycerol (Art. no. 8110)

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8049.0500
2 kg	Plastic container	8049.2000
5 kg	Plastic container	8049.5000

THIOGLYCOLAT MEDIUM PH. EUR/USP

Fluid medium used for sterility testing according to the Eur. Pharm., USP, FDA, and for the cultivation of microaerophilic and anaerobic organisms.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Casein peptone	15.000
Yeast extract	5.000
D(+)-Glucose	5.500
Sodium chloride	2.500
Sodium thioglycolate	0.500
L-Cystine	0.500
Resazurin	0.001
Special agar	0.750

Finaler pH (25 °C) 7.1 ±0.2

Quantity	Packaging Material	Art. no.
10x 100 ml	Glass bottles 125 ml	9561.0100
10x 200 ml	Glass bottles 250 ml	9561.0200
10x 300 ml	Glass bottles 500 ml	9561.0300
10x 450 ml	Glass bottles 500 ml	9561.0450
6x 600 ml	Glass bottles 1 l	9561.0600

TRIPLE SUGAR IRON AGAR (TSI AGAR)



Solid differential medium for the identification of enterobacteria according to ISO standards 6579, 6785 and 10272.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Peptone	20.000
Meat extract	3.000
Yeast extract	3.000
Lactose	10.000
Sucrose	10.000
D(+)-Glucose (Dextrose)	1.000
Sodium chloride	5.000
Iron(III) citrate	0.300
Sodium thiosulphate	0.300
Phenol red	0.024
Agar	12.000

Directions

Suspend 64.6 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9661.0500

TRYPTIC SOY AGAR (TSA) PH. EUR.



General purpose medium containing animal and plant peptone according to Pharmacopoeial Harmonised Methods and ISO standards ISO 9308-1, ISO 11731, ISO 11133, ISO 22717, ISO 22964.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Casein peptone	15.0
Soy peptone	5.0
Sodium chloride	5.0
Agar	15.0

Directions

Suspend 40 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9738.0500
2 kg	Plastic container	9738.2000
5 kg	Plastic container	9738.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm (double wrapped)	97620020
20 Plates	Prepared plates 90 mm (triple wrapped)	9696.0020
30 Plates	Contact plates 65 mm (double wrapped)	9698.0030
20 Plates	Settling plates n 90 mm (triple wrapped)	9778.0020
10x 100 ml	Glass bottles 125 ml	9692.0100
10x 200 ml	Glass bottles 250 ml	9692.0200
10x 400 ml	Glass bottles 500 ml	9692.0400
10x 450 ml	Glass bottles 500 ml	9692.0450



TRYPTIC SOY AGAR (TSA) WITH POLYSORBATE 80 AND LECITHIN PH. EUR.

Solid medium for the sampling of surfaces of sanitary importance using the contact plate technique.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Tryptone	15.00
Soy peptone	5.00
Sodium chloride	5.00
Lecithin	0.70
Polysorbate 80	5.00
Agar	15.00

Directions

Suspend 45.7 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9775.0500

TRYPTIC SOY AGAR (TSA) TLHTH (LECITHIN, HISTIDIN, POLYSORBAT 80, NATRIUMTHIOSULFAT)

General purpose medium for routine hygienic monitoring in presence of disinfectants. Containing animal and plant peptone. Ph. Eur. ISO 9308-1, ISO 11731, ISO 18415, ISO 21149, ISO 21150, ISO 22717, ISO 22718, ISO 22964.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)	
Casein peptone	15.00
Soy peptone	5.00
Sodium chloride	5.00
Histidin	1.00
Lecithine	0.70
Polysorbate 80	5.00
Sodium Thiosulfate	0.50
Agar	15.00

Final pH (25 °C) 7.3 ± 0.2



Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90mm (double wrapped)	9751.0020
60 Plates	Prepared plates 90 mm (triple wrapped)	9690.0060
30 Plates	Contact plates 55 mm (double wrapped)	9321.0030
24 Plates	Contact plates 55 mm (triple wrapped)	9551.0024

TRYPTIC SOY AGAR (TSA) 5% SHEEP BLOOD

Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Casein peptone	15.0
Peptone from soya	5.0
Sodium chloride	5.0
Agar	15.0
Sheep blood	50 ml

Final pH (25 °C) 7.2 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9750.0020

TRYPTIC SOY BROTH (TSB) PH. EUR.

Liquid high nutrient medium for general purpose use according to Pharmacopeial Harmonised Methods.



DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Casein peptone	17.00
Soy peptone	3.00
Sodium chloride	5.00
Dipotassium phosphate	2.50
Dextrose	2.50

Directions

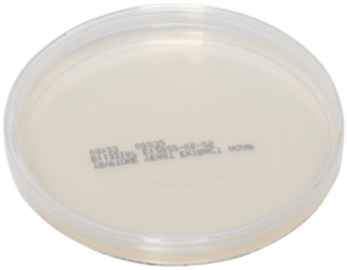
Dissolve 30 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.3 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9721.0500
2 kg	Plastic container	9721.2000
5 kg	Plastic container	9721.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20x 9 ml	Tubes 16 x 113 mm	9710.0009
20x 10 ml	Tubes 16 x 113 mm	9710.0010
10x 90 ml	Glass bottles 125 ml	9720.0090
10x 100 ml	Glass bottles 125 ml	9720.0100
10x 200 ml	Glass bottles 250 ml	9720.0200
10x 300 ml	Glass bottles 500 ml	9720.0300
10x 450 ml	Glass bottles 500 ml	9720.0450
10x 800 ml	Glass bottles 1 l	9720.0800
10x 900 ml	Glass bottles 1 l	9720.0900
5x 2 l	Bags	9740.2000
2x 5 l	Bags	9740.5000



TRYPTONE YEAST EXTRACT AGAR (WATER-PLATE-COUNT-AGAR)

Solid medium used for the enumeration of water microorganisms. ISO standards ISO 6222, ISO 5667-2/3, ISO 6887, ISO 8199, ISO 11133.

READY-TO-USE CULTURE MEDIA

Formulation (g/l)

Yeast Extract	3.00
Casein peptone (Tryptone)	6.00
Agar	15.00

Final pH (25 °C) 7.2 ± 0.2

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9684.0020
20x 15 ml	Tubes 16 x 113 mm	9688.0015
10x 100 ml	Glass bottles 125 ml	9688.0100
10x 20 ml	Glass bottles 250 ml	9688.0200
10x 450 ml	Glass bottles 500 ml	9688.0450



TSC AGAR (TRYPTOSE SULPHITE CYCLOSERINE AGAR)

Solid medium for the isolation and differentiation of *Clostridium perfringens* according to ISO 7937, ISO 6461-2, ISO 14189.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Tryptone	15.0
Soy peptone	5.0
Yeast extract	5.0
Sodium disulphite	1.0
Ammonium iron(III) citrate	1.0
Agar	18.0

Final pH (25 °C) 7.6 ±0.2

Directions

Suspend 45 g of powder in 1 l of distilled water.

Supplement

D-Cycloserine Selective Supplement (Art. no. 9795)
Egg Yolk Emulsion 20 % (Art. no. 9578)
Clostridium perfringens Supplement (Art. no. 9716)"

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8032.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
30 Plates	Membrane filtration plates 55 mm	9324.0030
10x 100 ml	Glass bottles 125 ml	9632.0100
10x 200 ml	Glass bottles 250 ml	9632.0200

VRBL AGAR (VIOLET RED BILE LACTOSE AGAR)



Solid medium for the detection and enumeration of coliforms in milk and other dairy products according to APHA and ICMSF, FIL-IDF as well as ISO 5541-1, and ISO 4832:2006.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Yeast extract	3.000
Peptone	7.000
Bile salts no. 3	1.500
Lactose	10.000
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.002
Agar	13.000

Directions

Suspend 39.5 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7883.0500

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9875.0020
30 Plates	Contact plates 65 mm	9666.0030
10x 100 ml	Glass bottles 125 ml	9867.0100
10x 200 ml	Glass bottles 250 ml	9867.0200



VRBD AGAR (VIOLET RED BILE DEXTROSE AGAR) PH. EUR.

Selective solid medium for the enumeration of enterobacteria acccording to ISO 21528 and Pharmacopeial Harmonised Methods.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Yeast extract	3.000
Pancreatic digest of gelatin	7.000
Bile salts	1.500
D(+)-Glucose (Dextrose)	10.000
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.002
Agar	13.000

Directions

Suspend 39.5 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7836.0500
2 kg	Plastic container	7836.2000
5 kg	Plastic container	7836.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9168.0020
30 Plates	Contact plates 65 mm	9416.0030
10x 100 ml	Glass bottles 125 ml	9863.0100
10x 200 ml	Glass bottles 250 ml	9863.0200
10x 450 ml	Glass bottles 500 ml	9863.0450



WORT AGAR

Solid medium for the general cultivation of yeasts.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)

Malt extract	15.00
Casein peptone	0.75
Maltose	12.75
Dextrin	2.75
Dipotassium hydrogen phosphate	1.00
Ammonium chloride	1.00
Agar	17.00

Directions

Suspend 50.25 g of powder in 1 l of distilled water.

Supplement

Glycerol (Art. no. 8110)

Final pH (25 °C) 4.8 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7772.0500
2 kg	Plastic container	7772.2000
5 kg	Plastic container	7772.5000

WORT BROTH



Liquid medium for the production of yeast suspensions.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Malt extract	15.00
Casein peptone	1.00
Maltose	12.50
Dextrin	2.50
Potassium dihydrogen phosphate	1.00
Ammonium chloride	1.00

Directions

Suspend 33 g of powder in 1 l of distilled water.

Final pH (25 °C) 4.8 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7759.0500
2 kg	Plastic container	7759.2000
5 kg	Plastic container	7759.5000

XLD AGAR (XYLOSE LYSINE DEOXYCHOLATE AGAR) ISO



Medium for the isolation of enteropathogenic species, especially *Shigella* and *Salmonella* in food and animal feeding stuff according to ISO 6579-1, ISO 21567.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Xylose	3.75
L-Lysine	5.00
Lactose	7.50
Sucrose	7.50
Sodium chloride	5.00
Yeast extract	3.00
Phenol red	0.08
Sodium deoxycholate	1.00
Sodium thiosulphate	6.80
Ammonium iron(III) citrate	0.80
Agar	15.00

Directions

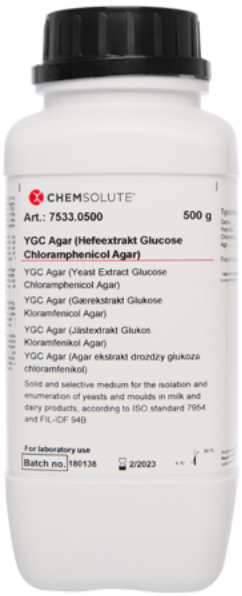
Suspend 55.43 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.4 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7649.0500
2 kg	Plastic container	7649.2000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9649.0020



YGC AGAR (YEAST EXTRACT GLUCOSE CHLORAMPHENICOL AGAR)

Solid and selective medium for the isolation and enumeration of yeasts and moulds in milk and dairy products according to ISO standard 7954 and FIL-IDF 94B.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
D(+)-Glucose (Dextrose)	20.00
Yeast extract	5.00
Chloramphenicol	0.10
Agar	15.00

Directions

Suspend 40 g of powder in 1 l of distilled water.

Final pH (25 °C) 6.6 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7533.0500
2 kg	Plastic container	7533.2000
5 kg	Plastic container	7533.5000

READY-TO-USE CULTURE MEDIA

Quantity	Packaging Material	Art. no.
20 Plates	Prepared plates 90 mm	9844.0020
10x 100 ml	Glass bottles 125 ml	9849.0100
10x 200 ml	Glass bottles 250 ml	9849.0200



2X YT AGAR

Solid nutrient medium for the cultivation of recombinant strains of *Escherichia coli* and for the growth of filamentous bacteriophages.

DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Tryptone	16.0
Yeast extract	10.0
Sodium chloride	5.0
Agar	15.0

Directions

Suspend 46 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7581.0500
2 kg	Plastic container	7581.2000
5 kg	Plastic container	7581.5000

2X YT BROTH

Liquid nutrient medium for the cultivation of recombinant strains of *Escherichia coli* and for the growth of filamentous bacteriophages.



DEHYDRATED CULTURE MEDIA

Formulation (g/l)	
Tryptone	16.0
Yeast extract	10.0
Sodium chloride	5.0

Directions

Suspend 31 g of powder in 1 l of distilled water.

Final pH (25 °C) 7.0 ±0.2

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	7548.0500
2 kg	Plastic container	7548.2000
5 kg	Plastic container	7548.5000



SUPPLEMENTS

CFC SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of *Pseudomonas spp.* according to ISO 13720 und ISO 16266.

Formulation (g/vial)

Cetrimide	0.005
Fucidin	0.005
Cephalothin sodium salt	0.025“

Directions

Each vial is sufficient for 500 ml (8897.0010) or 5 l (8897.5000) of Pseudomas Agar base (Art. no. 8895).

GHS

- H334 H317
- P285 P261 P280 P342+P311 P501a

Danger



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8897.0010
1 vial	Glass vial	8897.5000

CLOSTRIDIUM PERFRINGENS SUPPLEMENT

Sterile selective supplement for isolation and presumptive identification of *Clostridium perfringens* by using fluorogenic substrates.

Formulation (g/l)

MUP (4-Methylumbelliferyl phosphate)	0.025
D-Cycloserine	0.100

Directions

Each vial is sufficient for 200 ml of medium base (Art. no. 8032).

Storage

2-25 °C

Quantity	Packaging Material	Art. no.
10 vials	Glass vial	9716.0010

CN SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of *Pseudomonas spp.* according to ISO 16266 and DIN/EN 12780.

Formulation (g/vial)

Cetrimide	0.1000
Nalidixic acid, sodium salt	0.0075

Directions

Each vial is sufficient for 500 ml of Pseudomas Agar base (Art. no. 8895).

GHS

- H302 H315 H319 H334 H317 H400
- P261 P273 P280 P284 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P308+P311 P501

Danger



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8898.0010

D-CYCLOSERINE SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation and presumptive identification of *Clostridium perfringens* according to ISO standards and other regulations.

Formulation (g/vial)

D-Cycloserine	0.100

Directions

Each vial is sufficient for 250 ml of medium base (Art. no. 8032).

Storage

2-25 °C

Quantity	Packaging Material	Art. no.
10 vials	Glass vial	9795.0010

EGG YOLK EMULSION 20, STERILE

Sterile egg yolk emulsion for microbiological media according to ISO 7932:2004.

Formulation (ml/l)		Storage
Egg yolk	200 ml	8-14 °C
Sterile water	800 ml	

Quantity	Packaging Material	Art. no.
100 ml	Plastic bottle	9578.0100
500 ml	Plastic bottle	9578.0500

EGG YOLK TELLURITE EMULSION 20 %, STERILE

Sterile egg yolk emulsion with potassium tellurite for the preparation of Baird Parker Medium according to ISO 6888-1.

Formulation (ml/l):		Storage
Egg yolk	200 ml	8-14 °C
Potassium tellurite	2.10	
Sodium chloride	4.25	
Sterile water 800	ml	

Quantity	Packaging Material	Art. no.
50 ml	Plastic bottle	9557.0050
100 ml	Plastic bottle	9557.0100
500 ml	Plastic bottle	9557.0500

FRASER LISTERIA SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of *Listeria* species.

Formulation (g/vial)		Directions	Storage
Sodium nalidixate	0.0100	Each vial is sufficient for 500 ml of medium base (Art. no. 9439).	2-25 °C
Acriflavine	0.0125		
Ammonium iron(III) citrate	0.2500		

GHS

- H315-H317-H319-H334-H335
- P261-P285-P305+P351+P338-P405-P501



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	9442.0010

GLYCEROL (PROPAN-1,2,3-TRIOL) FOR MICROBIOLOGY AND MOLECULAR BIOLOGY

General purpose reagent for microbiology and molecular biology according to Eur. Pharm.

Formulation (g/l)	
Glycerol	1.0

Quantity	Packaging Material	Art. no.
100 ml	Plastic bottle	8110.0100

HALF FRASER LISTERIA SELECTIVE SUPPLEMENT

Sterile selective supplement for *Listeria* enrichment according to ISO 11290-1:2006.

Formulation (g/vial)		Directions	Storage
Sodium nalidixate	0.0050	Each vial is sufficient for 500 ml of medium base (Art. no. 9439).	2-25 °C
Acriflavine	0.0062		
Ammonium iron(III) citrate	0.2500		

GHS

- H315-H317-H319-H334-H335-H412
- P260-P280-P285-P305+P351+P338-P501



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	9250.0010

LEGIONELLA BCYE GROWTH SUPPLEMENT

Growth supplement to complete BCYE medium base.

Formulation (g/vial)		Directions	Storage
ACES buffer	5.000	Each vial is sufficient for 500 ml of medium base (Art. no. 8811). Content: 5x freeze-dried supplement + 5x sterile solvent“	2-25 °C
Potassium hydroxide	1.400		
Iron(III) pyrophosphate	0.125		
Potassium α-ketoglutarate	0.500		
L-Cysteine hydrochloride	0.200		

GHS

- H302-H314
- P260-P280-P303-P305+P361+P353-P305+P3510P338-P308+P311-P501



Quantity	Packaging Material	Art. no.
5 vials	Glass vial	8861.0005

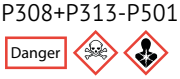
LEGIONELLA GVPC SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of *Legionella species* from water samples.

Formulation (g/vial)		Directions	Storage
Glycine	1.5000	Each vial is sufficient for 500 ml of medium base (Art. no. 8811).	2-25 °C
Vanomycin	0.0005		
Polymycin B sulphate	40000 IU		
Cycloheximide	0.0400		

GHS

- H301-H341-H360D
- P260-P280-P301+P330+P331-P308+P313-P501



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8820.0010

LISTERIA ENRICHMENT SUPPLEMENT (ALOA)

Supplement that enhances the growth of *Listeria spp.*

Formulation (g/bottle)	
L-alpha-Phosphatidylinositol	1.00
Sterile distilled water	24 ml

Directions

Each bottle is sufficient to supplement 500 ml (8815.0010) or 10 l (8815.9010) of medium base (Art. no. 8813)

Quantity	Packaging Material	Art. no.
10 bottles	Glass bottle	8815.0010
480 ml	Plastic bottle	8815.9010

LISTERIA SELECTIVE SUPPLEMENT (ALOA)

Selective supplement for isolation and confirmation of *Listeria monocytogenes* formulated according to ISO 11290.

Formulation (g/vial)	
Polymyxin B	38350 IU
Cycloheximide	0.025
Ceftazidime	0.010
Nalidixic acid	0.010

Directions

Each vial is sufficient to supplement 500 ml (8814.0010) or 10 l (8814.9010) of medium base (Art. no. 8813)

GHS

- H300 H334 H317 H341 H360D H412
- P261-P280 P284 P301+P310 P303+P361+P353 P304+P340 P305+P351+P338 P501

Danger 

Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8814.0010
1 vial	Glass vial	8814.9010

MUG (4-METHYLUMBELLIFERYL-β-D-GLUCURONIDE)

Sterile supplement for the detection of *Escherichia coli.*

Formulation (g/vial)	
4-Methylumbelliferyl-β-D-glucuronide	0.050

Directions

Each vial is sufficient for 500 ml of medium base.

Storage

2-25 °C

Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8751.0010

OXFORD AGAR SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of Listeria in food samples.

Formulation (g/vial)		Directions	Storage
Cycloheximide	0.2000	Each vial is sufficient for 500 ml of medium base (Art. no. 8519).	2-25 °C
Colistin sulphate	0.0100		
Acriflavine	0.0025		
Cefotetan	0.0010		
Phosphomycin sodium salt	0.0050		

GHS

- H300-H317-H319-H341-H360D-H411
- P261-P280-P305+P351+P338-P309+P311-P501



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	9594.0010

PALCAM LISTERIA AGAR SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of Listeria spp.

Formulation (g/vial)		Directions	Storage
Polymyxin B	0.0050	Each vial is sufficient for 500 ml of medium base (Art. no. 8429).	2-25 °C
Acriflavine	0.0025		
Ceftazidime	0.0100		

GHS

- H318-H412
- P273-P280-P303+P361+P353-P305+P351+P338-P501



Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8439.0010

POLYMYXIN B SELECTIVE SUPPLEMENT

Sterile selective supplement for the isolation of *Bacillus* cereus in food samples.

Formulation (g/vial)		Directions	Storage
Polymyxin B sulphate	50000	Each vial is sufficient to supplement 500 ml (8477.0010) or 5 l (8477.5000) of medium base (Art. no. 8710).	2-25 °C
Expcipient (sufficient amount)			

Quantity	Packaging Material	Art. no.
10 vials	Glass vial	8477.0010
1 vial	Glass vial	8477.5000

TTC SOLUTION 1 %, STERILE

Indicator, added to many microbiological culture media.

Formulation (g/l)		Storage
2,3,5-Triphenyl tetrazolium chloride	10.0	4-12 °C
Sterile water	1000 ml	

Quantity	Packaging Material	Art. no.
100 ml	Glass vial	8055.0100


MEDIA
COMPONENTS

AGAR BACTERIOLOGICAL, EUROPEAN TYPE

Specification

- Particle size 95 % over sieve 60 mm
- Gel strength (1.5 %, Nikan) 800-1100 g/cm²
- Melting point (1.5 %) 85 ±3 °C
- Gelling point (1.5 %) 35 ±3 °C
- Turbidity (1.5 %) max. 12
- pH (1.5 %) after autoclaving 6.5 ±0.4
- Loss on drying max. 10 % (w/w)
- Ash max. 4.5 % (w/w)
- Total aerobic count < 3000 CFU/g
- Coliforms < 3 CFU/g
- Moulds and yeast < 100 CFU/g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9972.0500
2 kg	Plastic container	9972.2000
5 kg	Plastic container	9972.5000

MALT EXTRACT

Specification

- Loss on drying max. 6.0 %
- Ash max. 4.5 %
- Sodium chloride (NaCl) max. 1.0 %
- pH (3 % solution) 4.8-5.8
- Maltose > 60 %
- Total aerobic count < 10000 CFU/g
- Moulds and yeast < 20 CFU/g
- *Escherichia coli* absent in 10 g
- *Salmonella spp.* absent in 25 g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8745.0500
2 kg	Plastic container	8745.2000
5 kg	Plastic container	8745.5000

PEPTONE FROM CASEIN (PANCREATIC DIGESTED CASEIN)

Specification

- Amino nitrogen (AN) > 3.9 (% w/w)
- Total nitrogen (TN) > 10.0 (% w/w)
- Loss on drying max. 6.0 %
- Chlorides (NaCl) max. 1.0 %
- Ash max. 17.0 %
- pH (2 % solution) after autoclaving 6.5-7.5
- Total aerobic count < 10000 CFU/g
- Coliforms < 10 CFU/g
- Moulds and yeast < 100 CFU/g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9754.0500
2 kg	Plastic container	9754.2000
5 kg	Plastic container	9754.5000

SOY PEPTONE, PAPAIN-DIGESTED (ANIMAL/GMO FREE)

Specification

- Amino nitrogen (AN) 2.0-3.5 %
- Total nitrogen (TN) 9.0-11.0 %
- Loss on drying max. 6.0 %
- Chlorides (NaCl) max. 1.0 %
- Ash max. 21.0 %
- pH (2 % solution) 6.5-7.5
- Total aerobic count < 10000 CFU/g
- Coliforms < 10 CFU/g
- Moulds and yeast < 20 CFU/g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8490.0500

TRYPTONE FROM CASEIN (TRYPSIN-DIGESTED CASEIN)

Specification

- Amino nitrogen (AN) 3.0 – 4.5 % w/w
- Total nitrogen (TN) 12.0 – 13.5 % w/w
- Loss on drying max. 6.0 %
- Chlorides (NaCl) max. 1.0 %
- Ash max. 6.0 %
- pH (2 % solution) 6.8-7.2
- Total aerobic count < 10000 CFU/g
- Coliforms < 10 CFU/g
- Moulds and yeast < 20 CFU/g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	8028.0500
2 kg	Plastic container	8028.2000

YEAST EXTRACT

Specification

- Amino nitrogen (AN) min. 4.5-5.8 %
- Total nitrogen (TN) 10.0-11.8 %
- Total carbohydrates 7.0-13.0 % (g/100 g)
- Loss on drying max. 6.0 %
- Sodium chloride (NaCl) max. 0.5 %
- pH (2 % solution) 6.5-7.5
- Total aerobic count < 5000 CFU/g
- Coliforms < 5 CFU/g
- Moulds and yeast < 100 CFU/g

Quantity	Packaging Material	Art. no.
500 g	Plastic bottle	9263.0500
2 kg	Plastic container	9263.2000
5 kg	Plastic container	9263.5000


MORE
INFORMATION

GREEN SOLVENTS FOR SUSTAINABLE CHEMISTRY

We support the concept of Green Chemistry and the growing awareness of the environmental impacts of chemical products and their production processes. Green Solvents are a vital part of sustainable chemistry. Besides obvious “green” solvents such as water and ethanol, CHEMSOLUTE® contains “green” alternatives to commonly used solvents.

Paul Anastas and John C. Warner developed the practice of Green Chemistry by formulating the 12 principles of the US Environmental Protection Agency (EPA):

GREEN CHEMISTRY – THE 12 PRINCIPLES

- Waste prevention instead of treating or cleaning up waste
- Atom economy and atom efficiency
- Less hazardous chemical syntheses
- Design safer chemicals
- Safer solvents and auxiliaries
- Design for energy efficiency
- Use of renewable feedstocks
- Reduce derivatives
- Catalytic reagents instead of stoichiometric reagents
- Design products for degradation
- Real-time analysis for pollution prevention
- Inherently safer chemistry for accident prevention



GREEN SOLVENTS AS AN ALTERNATIVE TO:

Art. no.	Description	Acetonitrile	DCM (Dichlormethane)	DCM HPLC (Dichlormethane)	THF (Tetrahydrofuran)	DMSO (Dimethyl sulfoxide)	DMF (Dimethylformamide)	MTBE (tert.-Butyl methyl ether)	NMP (N-Methyl-2-pyrrolidone)	1,4-Dioxane	Diethyl ether	Toluene	Xylene	HMPT (Hexamethyl-phosphoric triamide)	Petroleum derivates
2497	CPME (Cyclopentyl methyl ether)				x	x		x		x	x				
2322	Dihydrolevoglucosenone						x		x						
2327	DMPU (N,N'-Dimethylpropylene urea)						x							x	
2314	1,3-Dioxolane		x		x	x						x	x		
1442	Ethanol-Ethyl acetate solution 3:1 (v/v)			x											
2036	Glycerol anhydrous p. a.	x				x	x								
2039	Glycerol anhydrous puriss.	x				x	x								
1483	2-Methyltetrahydrofuran		x		x						x				
1474	2-Methyltetrahydrofuran		x		x										
1180	1,3-Propanediol														x



Please check the best-before date on the product package before storage. The date refers to the shelf life of unopened packages when stored as indicated on the label.



GENERAL INSTRUCTIONS

STORAGE OF DEHYDRATED MEDIA

Be aware that dehydrated media are highly hygroscopic, light-sensitive and heat-sensitive. They must be stored at a temperature of 4–30 °C, larger temperature fluctuations and direct sunlight are to be avoided. Close an open package thoroughly to prevent moisture from getting in.

PREPARATION OF THE MEDIA

Follow the instructions on the respective label or the technical data sheet. The safety data sheet contains information on possible hazards.

Place a quantity of medium powder, measured according to the manufacturing instructions (weight tolerance max. 1 %), in a clean, sterile and undamaged vessel with at least twice the final volume to allow thorough mixing.

Add a portion of the required amount of distilled water and stir to dissolve the medium. Then add the remaining water from the sides of the container to wash off possible powder remains. Agar-containing media must be brought to the boil carefully and stirred to dissolve the agar before sterilization.

The medium should preferably be sterilized on the day of manufacture.

Unless otherwise stated, the pH of the medium does not need to be adjusted and will be within the specified pH range after sterilization. Measure at 25 °C. Especially with older media batches, the pH should be checked after autoclaving. The pH can change considerably as a result of autoclaving.

STERILIZATION

Please follow the instructions on the respective label or technical data sheet. Observe the general laboratory practice for using autoclaves. Avoid autoclaving the medium longer than necessary or at a higher temperature.

SUPPLEMENTATION

Supplements should be stored according to the instructions and reconstituted if necessary. Follow the instructions on the packaging.

Before adding heat-sensitive supplements, the medium should be cooled down to 50 °C. The supplement should be warmed up to room temperature before addition. Mix quickly and thoroughly before distributing the medium into the final containers.

CHEMSOLUTE® READY-TO-USE CULTURE MEDIA FOR MICROBIOLOGY

CHEMSOLUTE® offers you a constantly growing range of ready-to-use microbiological culture media for the detection of microorganisms for a great variety of applications.

Contact plates, size 55 mm
CHEMSOLUTE® prepared contact plates for microbiological control of disinfection and cleaning of surfaces are packed in practical blister packs of 6 plates each. The blisters are offered in cellophane bags, double or triple packed, irradiated bags with an 8-14 kGy irradiation indicator on each blister. Storage is at room temperature with a shelf life of 12 to 15 months.

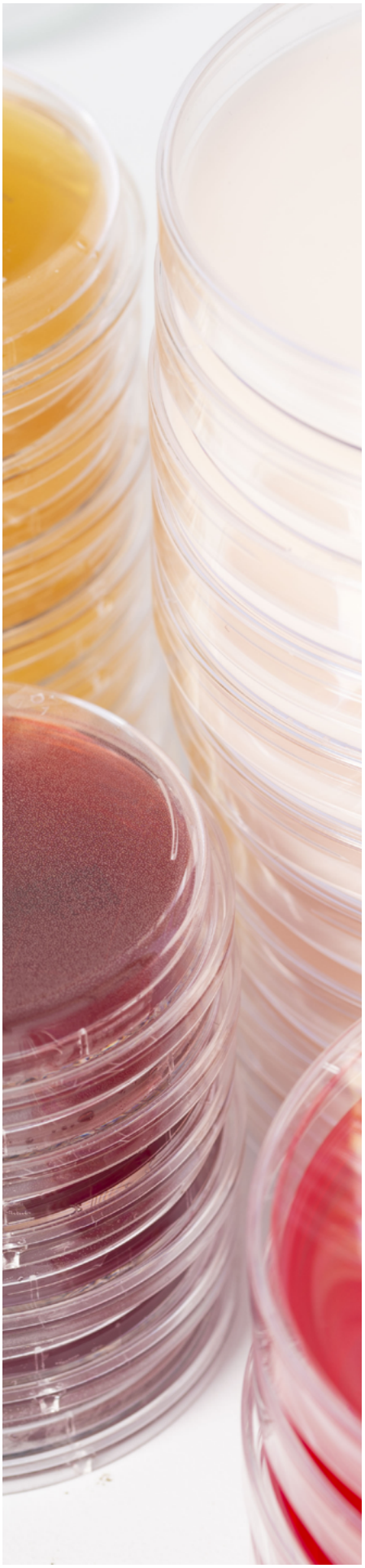
Prepared plates, size 90 mm
CHEMSOLUTE® ready-to-use plates are available for a broad range of applications for isolation and identification of microbiological organisms. Also available are plates for hygiene control for use in monitoring of microbiological contamination of surfaces and air in cleanrooms, isolators, for example in food industry and hospitals. These ready-to-use agar plates are packed with cellophane foil in packaging units of 10.

Depending on the application, the plates are also available double or triple packed with an 8-14 kGy irradiation indicator on the side. Storage is usually refrigerated with a shelf life of 3 or up to 6 months.

Ready-to-use media in bottles and tubes
CHEMSOLUTE® liquid and solid ready-to-use media in bottles and tubes are available in a variety of sizes. Bottles of agar for pouring plates are sealed with plastic lids suitable for heating in a microwave. Ready-to-use liquid culture media for pre-enrichment, dilution or sterility control are provided with a septum cap. Storage is at room temperature with a shelf life of 12 to 15 months.

Ready-to-use media in bags
CHEMSOLUTE® liquid ready-to-use media in bags for the larger regular demand are available in 2 l, 3 l and 5 l sizes. The sterile PVC bags are plasticiser-free and suitable for use in food testing. With two outlets, a latex-free polycarbonate injection port for the addition of additives and a connection point for an automatic dispenser. Stored at room temperature, the bags have a shelf life of between 12 and 16 months depending on the medium.





APPLICATION AREAS OF THE MICROBIOLOGICAL CULTURE MEDIA

Product name	Water analysis	Food analysis	Pharma/ Cosmetics	Molecular Biology
Baird Parker Agar (base)		X	X	
Blood Agar (base)			X	
Brain Heart Infusion Broth (BHI Broth)	X	X		
Brilliant Green Bile Broth	X	X		
Casein Peptone Lecithin Polysorbate Broth (base)		X	X	
Cetrimide Agar Ph. Eur.	X	X	X	
Columbia Agar Ph. Eur.		X	X	
DEV Nutrient Agar	X	X		
DG 18 Agar (Dichloran Glycerol Chloramphenicol Agar) (base)		X		
DRBC Agar (Dichloran Rose Bengal Chloramphenicol Agar)		X		
Enterobacteriaceae Enrichment Broth Mossel (EE Broth)			X	
Fraser Broth (base)		X		
Kanamycin Aesculin Azide Agar Base (KAA Agar)		X		
Lactose Broth	X	X	X	
Lactose Broth DEV	X			
Lauryl Sulphate Broth		X		
LB Agar acc. to Lennox				X
LB Agar acc. to Miller				X
LB Broth acc. to Lennox				X
LB Broth acc. to Miller				X
Legionella BCYE Agar (base)	X	X		
Listeria Selective Agar Base according to Ottaviani and Agosti (ALOA)		X	X	
MacConkey Agar Ph. Eur.	X	X	X	
MacConkey Broth Ph. Eur.		X	X	
Malt Extract Agar		X	X	
Malt Extract Broth		X	X	
Mannitol Salt Agar (Chapman Agar)		X	X	
Maximum Recovery Diluent		X		
MRS Agar ISO		X		
MRS Broth		X		
MYP Agar (Mannitol Egg Yolk Polymyxin Agar) (base)		X		
Nutrient Agar APHA	X	X	X	

Product name	Water analysis	Food analysis	Pharma/ Cosmetics	Molecular Biology
Orange Serum Agar		X		
Oxord Listeria Agar (base)		X		
PALCAM Listeria Agar (base)		X		
Peptone Water, buffered ISO	X	X	X	
Peptone Water, buffered Ph.Eur.			X	
Plate Count Agar (PCA)	X	X	X	
Plate Count Skim Milk Agar (PCA)		X		
Potato Dextrose Agar Ph. Eur.		X	X	
Pseudomonas Agar (Base) ISO		X		
R2A Agar Ph. Eur.	X	X	X	
Rappaport Vassiliadis Broth		X		
Reinforced Clostridial Medium (RCM) Ph. Eur.		X		
Sabouraud 2 % Glucose Broth Ph. Eur.		X	X	
Sabouraud 4 % Dextrose Agar Ph. Eur.		X	X	
Slanetz and Bartley Agar (base)	X			
Standard 1 Nutrient Agar		X		
Standard 1 Nutrient Broth		X		
Terrific Broth				X
Triple Sugar Iron Agar		X		
Tryptic Soy Agar Ph. Eur.	X	X	X	
Tryptic Soy Agar with Polysorbate 80 and Lecithin Ph. Eur.	X	X	X	
Tryptic Soy Broth Ph. Eur.	X	X	X	
TSC Agar (Tryptose Sulfite Cycloserine Agar)		X		
VRB Agar (Violet Red Bile Lactose Agar)	X	X		
VRBD Agar (Violet Red Bile Dextrose Agar) Ph. Eur.	X	X		
Wort Agar		X		
Wort Broth		X		
XLD Agar (Xylose Lysine Deoxycholate Agar) ISO		X	X	
YGC Agar (Yeast Extract Glucose Chloramphenicol Agar)		X		
YPD Broth				X
2xYT Agar				X
2xYT Broth				X



CHEMSOLUTE® SORB

CHEMSOLUTE® Sorb is an innovative polymer/mineral based chemical binding agent, which can be used for all liquids apart from mercury. The absorbed chemicals and oils are bound very quickly and effectively, which protects the employees and the environment and reduces the fire hazard, even for liquids with a high vapour pressure.

Due to its fine-granular structure CHEMSOLUTE® Sorb doesn't raise dust and can therefore be used indoors without any problems. As a registered oil binder according to guideline Type III R (MPA NRW 22 000 8388 10), it is also ideally suited for traffic areas.

- Very high binding capacity
- Simple to dose
- Dust-free
- Skin-compatible
- Dam formation possible
- Colour change indicates acids and alkalis
- Saturation indicated by colour intensity

SIMPLE AND ECONOMICAL APPLICATION

Application
Apply CHEMSOLUTE® Sorb equally and extensively on to the spilled chemicals. It sinks in immediately and initiates the absorption process. Once the absorption has finished, CHEMSOLUTE® Sorb remains dry which can be seen by the lighter colour. Now the dispersal can be stopped.

Clean up
The chemicals and oils are incorporated into a gel structure and can therefore be easily swept up. The surface remains almost dry.

Disposal
The disposal is very easy. Above all, only a small amount of contaminant-binding agent mixture accumulates, as CHEMSOLUTE® Sorb binds liquids in a ratio of up to 1:75. This means that only 100 g are required for 7.5 l of liquid. The absorption capacity depends on the water content of the chemical to be bound. If required, the original substance can even be recovered through thermal processes.





VAPOUR BARRIER FOR SMOKING CHEMICALS

CHEMSOLUTE® Sorb acts as a barrier for emissions. If sufficiently dosed, it acts as a vapour barrier so that fewer pollutants can escape into the air. This protects the employees and reduces environmental pollution. CHEMSOLUTE® Sorb is non-combustible and the gel binding prevents an increase in surface area. Therefore, you can assume that CHEMSOLUTE® Sorb is not oxidizing.

DAM FORMATION

To prevent outflow with larger volumes of liquid, CHEMSOLUTE® Sorb can also be dispensed to quickly create an effective barrier. Chemical-binding tubes and cushions are not necessary.



INDICATOR FUNCTION

The pH indicator contained in CHEMSOLUTE® Sorb shows whether the liquids absorbed are acids or alkalis via a colour change:

Colour change from green to **yellow** = acid
Colour change from green to **red** = alkali

Note: Chlorine compounds or hydrogen peroxide can bleach the pH indicator in a short time.





PACKAGING SIZES

CHEMSOLUTE® Sorb is available in three different packaging sizes to suit the different areas of application:

Dispenser container (1,000 ml)

Transparent plastic bottle with two different openings: fine dosage opening for very economical use and a slightly larger gap opening. Ideal for the lab bench, fume hood or small chemicals cupboard.



Wide-necked container (4,000 ml)

White plastic bottle with wide-neck opening for quick application wherever larger quantities of liquid are used, e.g. in a chemical store.



Reserve bucket (5 kg)

Plastic bucket as a reserve for filling up the smaller containers or for areas where very large quantities of liquid are used, e.g. when filling up drums or tanks.





ORDERING CUSTOM-MADE LABORATORY CHEMICALS

Our CHEMSOLUTE® brand offers you laboratory chemicals, reagents, biological buffers and a top quality microbiology portfolio to assist you in performing your challenging assignments.

But sometimes, even the widest selection of standard ready-to-use chemicals is not enough in the face of special requirements. That's why we have expanded our services to provide you with attractive options:

Produced to your specifications

Solutions, powders, mixtures, acids and alkalis.

Packaged for you
Not only do we customise the product, we also package the finished item to your specifications. Choose the fill volume, container size and packaging material that you require (e.g. paper, glass bottle, drum, canister).

Ground and screened for you
Solids such as salts and powders.

Labelled for you
Your overpacks, bottles, tins, bags and canisters together with your labels and your logo.

YOUR BENEFITS

Benefit from our expertise and competence.

- Constant quality at low cost and low risk
- Delivery of the exact volume required
- Less waste due to needs-based purchasing
- Save valuable time and costs

We are delighted to inform and advise you and look forward to receiving your enquiry for chemicals made to measure.

Backed by more than 130 years of trading experience we are acting for the future. Therefore we not only supply consumables, instruments, Life Science products and equipment for your laboratory, we also supply the chemicals – now including Customised Solutions to your specifications.

NO MORE NEED TO PRODUCE YOURSELF

We assume everything that is necessary to produce customised products for your applications. During the enquiry phase we join forces with you to develop the best possible solutions to meet your requirements.

It only takes a few days to receive a complete offer from us for a new customised product: Your formulation including the production and test specifications and the quality and safety documentation (SDS), labelling and price calculation. The customised product is then delivered to you. In some cases, small batches are also possible.

CUSTOMISED SPECIFICATIONS

Our processes are certified to ISO 9001:2015 to guarantee their quality in every respect.

Based on your specifications we include the relevant parameters in the specifications and the certificate of analysis for the product manufactured for you.

It goes without saying that our quality claim also applies to safe, rapid transportation by our logistics experts.



GLOBALLY HARMONIZED SYSTEM (GHS)
SYMBOLS, HAZARD AND PRECAUTIONARY STATEMENTS

GHS Symbols



GHS01 GHS02 GHS03 GHS04 GHS05



GHS06 GHS07 GHS08 GHS09

Hazard statements (H-Phrases)

	Hazard statements for physical hazards
H200	Unstable explosives.
H201	Explosive; mass explosion hazard.
H202	Explosive, severe projection hazard.
H203	Explosive; fire, blast or projection hazard.
H204	Fire or projection hazard.
H205	May mass explode in fire.
H206	Fire, blast or projection hazard; increased risk of explosion if desensitising agent is reduced.
H207	Fire or projection hazard; increased risk of explosion if desensitising agent is reduced.
H208	Fire hazard; increased risk of explosion if desensitising agent is reduced.
H220	Extremely flammable gas.
H221	Flammable gas.
H222	Extremely flammable aerosol.
H223	Flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H230	May react explosively even in the absence of air.
H231	May react explosively even in the absence of air at elevated pressure and/or temperature.
H232	May ignite spontaneously if exposed to air.
H240	Heating may cause an explosion.
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H250	Catches fire spontaneously if exposed to air.
H251	Self-heating: may catch fire.
H252	Self-heating in large quantities; may catch fire.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H261	In contact with water releases flammable gases.
H270	May cause or intensify fire; oxidiser.
H271	May cause fire or explosion; strong oxidiser.
H272	May intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H281	Contains refrigerated gas; may cause cryogenic burns or injury.
H290	May be corrosive to metals.

	Hazard statements for health hazards
H300	Fatal if swallowed.
H300+ H310	Fatal if swallowed or in contact with skin.
H300+H330	Fatal if swallowed or if inhaled.
H300+H310+ H330	Fatal if swallowed, in contact with skin or if inhaled.
H301	Toxic if swallowed.
H301+ H311	Toxic if swallowed or in contact with skin.
H301+ H331	Toxic if swallowed or if inhaled.
H301+H311+ H331	Toxic if swallowed, in contact witk skin or if inhaled.
H302	Harmful if swallowed.
H302+ H312	Harmful if swallowed or in contact with skin.
H302+ H332	Harmful if swallowed or if inhaled.
H302+ H312+ H332	Harmful if swallowed, in contact with skin or if inhaled.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H310+H330	Fatal in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H311+H331	Toxic in contact with skin or if inhaled.
H312	Harmful in contact with skin.
H312+H332	Harmful in contact witk skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.
H341	Suspected of causing genetic defects *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.
H350	May cause cancer *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.
H350i	May cause cancer by inhalation.

H351	Suspected of causing cancer *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H360	May damage fertility or the unborn child *<state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H360D	May damage the unborn child
H360Df	May damage the unborn child. Suspected of damaging fertility.
H360F	May damage fertility
H360Fd	May damage fertility. Suspected of damaging the unborn child
H360FD	May damage fertility. May damage the unborn child
H361	Suspected of damaging fertility or the unborn child *<state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H362	May cause harm to breast-fed children.
H370	Causes damage to organs *<state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H371	May cause damage to organs *<or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H372	Causes damage to organs *<or state all organs affected, if known>* through prolonged or repeated exposure *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*
H373	May cause damage to organs *<or state all organs affected, if known>* through prolonged or repeated exposure *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.*

	Hazard statements for environmental hazards
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
H420	Harms public health and the environment by destroying ozone in the upper atmosphere.

EUH Phrases

EUH014	Reacts violently with water.
EUH018	In use may form flammable/explosive vapour-air mixture.
EUH019	May form explosive peroxides.
EUH029	Contact with water liberates toxic gas.
EUH031	Contact with acids liberates toxic gas.
EUH032	Contact with acids liberates very toxic gas.
EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH070	Toxic by eye contact.
EUH071	Corrosive to the respiratory tract.
EUH201	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.
EUH201A	Warning! Contains lead.
EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
EUH203	Contains chromium (VI). May produce an allergic reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
EUH207	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
EUH208	Contains <name of sensitising substance>. May produce an allergic reaction.
EUH209	Can become highly flammable in use.
EUH209A	Can become flammable in use.
EUH210	Safety data sheet available on request.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
EUH212	Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Source: Regulation (EG) No. 1272/2008 and changes to commission regulation (EU) No. 605/2014 of the 5 June 2014 and the correction of regulation (EG) No. 1272/2008 official journal (94,58.lg.) of the 10 April 2015.

GLOBALLY HARMONIZED SYSTEM (GHS)
SYMBOLS, HAZARD AND PRECAUTIONARY STATEMENTS

GHS Symbols



GHS01 GHS02 GHS03 GHS04 GHS05



GHS06 GHS07 GHS08 GHS09

Precautionary statements (P-Phrases)

	General
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

	Precautionary statements — Prevention
P201	**Obtain special instructions before use.**
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P212	Avoid heating under confinement or reduction of the desensitising agent.
P220	Keep away from clothing and other combustible materials.
P222	Do not allow contact with air.
P223	Do not allow contact with water.
P230	Keep wetted with ...
P231	Handle and store contents under inert gas/...
P231 + P232	Handle and store contents under inert gas/... Protect from moisture.
P232	Protect from moisture.
P233	Keep container tightly closed.
P234	Keep only in original packaging.
P235	Keep cool.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P244	Keep valves and fittings free from oil and grease.
P250	Do not subject to grinding/shock/friction/...
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face/ hearing protection.
P282	Wear cold insulating gloves and either face shield or eye protection.
P283	Wear fire resistant or flame retardant clothing.
P284	[In case of inadequate ventilation] wear respiratory protection.

	Precautionary statements — Response
P301	IF SWALLOWED:
P301+ P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P301+ P312	IF SWALLOWED: Immediately call a POISON CENTER/doctor/... if you feel unwell.
P301+ P330+ P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302	IF ON SKIN:
P302 + P334	IF ON SKIN: Immerse in cool water or wrap in wet bandages.
P302+ P352	IF ON SKIN: Wash with plenty of water/...
P302 + P335 + P334	IF ON SKIN:. Immerse in cool water [or wrap in wet bandages].
P303	IF ON SKIN (or hair):
P303+ P361+ P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304	IF INHALED:
P304+ P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305	IF IN EYES:
P305+ P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P306	IF ON CLOTHING:
P306+ P360	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P308	IF exposed or concerned:
P308+ P311	IF exposed or concerned: Call a POISON CENTER/doctor/...
P308+ P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/...
P311	Call a POISON CENTER/doctor/...
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P313	Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P315	Get immediate medical advice/attention.
P320	Specific treatment is urgent (see ... on this label).
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P332	If skin irritation occurs:

P332+ P313	If skin irritation occurs: Get medical advice/attention.
P333	If skin irritation or rash occurs:
P333+ P313	If skin irritation or rash occurs: Get medical advice/attention.
P334	Immerse in cool water [or wrap in wet bandages].
P335	Brush off loose particles from skin.
P336	Thaw frosted parts with lukewarm water. Do no rub affected area.
P336 + P315	Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention.
P337	If eye irritation persists:
P337+ P313	If eye irritation persists: Get medical advice/attention.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P340	Remove person to fresh air and keep comfortable for breathing.
P342	If experiencing respiratory symptoms:
P342+ P311	If experiencing respiratory symptoms: Call a POISON CENTER/ doctor/...
P351	Rinse cautiously with water for several minutes.
P352	Wash with plenty of water/...
P353	Rinse skin with water [or shower].
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P361	Take off immediately all contaminated clothing.
P361+ P364	Take off immediately all contaminated clothing and wash it before reuse.
P362	Take off contaminated clothing.
P362+ P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P364	And wash it before reuse.
P370	In case of fire:
P370+ P376	In case of fire: Stop leak if safe to do so.
P370+ P378	In case of fire: Use ... to extinguish.
P370 + P380 + P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P370 + P372 + P380 + P373	In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P370 + P380 + P375 [+ P378]	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use ... to extinguish].
P371	In case of major fire and large quantities:
P371+ P380+ P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P372	Explosion risk.
P373	DO NOT fight fire when fire reaches explosives.
P375	Fight fire remotely due to the risk of explosion.
P376	Stop leak if safe to do so.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P378	Use... to extinguish.
P380	Evacuate area.
P381	In case of leakage, eliminate all ignition sources.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.

	Precautionary statements — Storage
P401	Store in accordance with...
P402	Store in a dry place.
P402+ P404	Store in a dry place. Store in a closed container.
P403	**Store in a well-ventilated place.**
P403+ P233	Store in a well-ventilated place. Keep container tightly closed.
P403+ P235	Store in a well-ventilated place. Keep cool.
P404	Store in a closed container.
P405	Store locked up.
P406	Store in a corrosion resistant/... container with a resistant inner liner.
P407	Maintain air gap between stacks or pallets.
P410	Protect from sunlight.
P410+ P403	Protect from sunlight. Store in a well-ventilated place.
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
P411	Store at temperatures not exceeding ... °C/ ... °F.
P412	Do not expose to temperatures exceeding 50 °C/122 °F.
P413	Store bulk masses greater than ... kg/... lbs at temperatures not exceeding ... °C/... °F.
P420	Store separately.
P501	Dispose of contents/container to (in accordance with local/regional/ national/international regulations.)
P502	Refer to manufacturer or supplier for information on recovery or recycling.
P503	Refer to manufacturer/ supplier/... for information on disposal/ recovery/ recycling

Source: Regulation (EG) No. 1272/2008 and changes to commission regulation (EU) No. 605/2014 of the 5 June 2014 and the correction of regulation (EG) No. 1272/2008 official journal (94,58.lg.) of the 10 April 2015.

THREAD SIZES OF OUR PACKAGING FOR CHEMICALS

Art. no.	Thread
105.0250	DIN 45
105.1000	DIN 54
110.1000	DIN 54
112.1000	DIN 54
120.1011	GL 45
123.1000	DIN 54
129.0100	DIN 32
133.0100	DIN 32
133.0250	DIN 45
300.1000	DIN 45
320.1000	42 mm
320.5000	DIN 50
360.1000	DIN 45
360.5000	42 mm
371.5000	42 mm
399.2500	DIN 45
410.9020	DIN 61
418.1000	DIN 45
418.2500	DIN 45
435.1000	GL45
437.1011	DIN 45
445.9030	Nr. 61
449.91100	150 mm + 50 mm
452.2511	45 mm
455.1000	DIN 45
455.2500	DIN 45
456.1000	DIN 45
456.2500	DIN 45
464.5000	38 mm
469.5000	42 mm
469.9010	42 mm
470.1000	DIN 45
470.2500	DIN 45
476.1011	DIN 45
476.2511	DIN 45
480.5000	Nr. 45
480.9010	Nr. 45
480.9020	Nr. 61
535.5000	RD 80
697.2500	DIN 45
704.2500	DIN 45

Art. no.	Thread
707.2500	DIN 45
710.2500	DIN 45
715.2500	DIN 45
726.0250	22 mm
728.1000	DIN 45
728.2500	DIN 45
733.2500	DIN 45
739.2500	DIN 45
740.0500	GL45
741.2500	DIN 45
741.9025	2" + ¾"
743.0500	GL45
752.1000	DIN 45
752.2500	DIN 45
752.8025	DIN 61
752.9025	2" + ¾"
752.9200	2" + ¾"
760.1000	DIN 45
769.0025	18 mm
775.1000	DIN 45
797.1000	DIN 45
797.2500	DIN 45
803.1011	GL 45
804.1000	DIN 54
807.1000	DIN 45
808.1011	GL 45
809.9020	Nr. 61
811.1000	DIN 45
811.2500	DIN 45
815.1000	DIN 45
819.1011	GL 45
820.2511	DIN 45
822.2500	DIN 45
824.1011	GL45
824.2511	45 mm
824.9025	60 mm
825.2511	DIN 45
826.1011	GL45
827.1011	DIN 45
827.2511	DIN 45
8277.0025	DIN 32

Art. no.	Thread
829.2511	45 mm
831.2500	DIN 45
836.1000	DIN 45
836.2500	DIN 45
836.2511	DIN 45
836.5000	DIN 51
836.9020	DIN 61
838.1011	DIN 45
838.2500	DIN 45
841.1000	DIN 45
841.9510	60 mm
845.1000	DIN 45
850.0500	GL45
850.1000	DIN 45
850.9510	60 mm
855.1000	DIN 45
857.1011	DIN 45
859.1000	45 mm
859.2500	DIN 45
860.1000	DIN 45
863.1011	DIN 45
865.1000	DIN 45
865.2500	DIN 45
869.9010	Nr. 51
871.1000	DIN 45
871.2500	DIN 45
874.1000	DIN 45
874.2500	DIN 45
874.5000	DIN 51
874.9025	DIN 61
877.91400	150 mm + 50 mm
878.0050	32 mm
878.0250	45 mm
881.1000	DIN 45
884.1011	DIN 45
887.0100	DIN 32
889.9010	DIN 45
892.1011	DIN 45
892.2500	DIN 45
892.2511	DIN 45
892.9025	DIN 61

Art. no.	Thread
990.0010	DIN 32
1008.0050	DIN 32
1024.1000	DIN 45
1024.2500	DIN 45
1048.0250	DIN 45
1100.1000	DIN 45
1100.2500	DIN 45
1101.0500	45 mm
1103.1000	45 mm
1105.0025	28 mm
1107.0025	28 mm
1107.0100	35 mm
1109.1000	DIN 45
1111.1000	DIN 45
1112.1000	DIN 45
1113.1000	DIN 45
1114.1000	DIN 45
1114.5000	31 mm
1115.1000	DIN 45
1116.1000	DIN 45
1117.1000	DIN 45
1117.5000	31 mm
1118.1000	DIN 45
1119.1000	DIN 45
1119.5000	31 mm
1120.1000	DIN 45
1120.5000	31 mm
1121.1000	DIN 45
1122.0500	45 mm
1123.0252	24 mm
1124.1000	DIN 45
1125.0252	24 mm
1125.1012	28 mm
1126.1012	28 mm
1127.1000	DIN 45
1128.0252	24 mm
1128.1012	28 mm
1129.1000	DIN 45
1130.1000	DIN 45
1131.0252	24 mm
1131.1012	28 mm

THREAD SIZES OF OUR PACKAGING FOR CHEMICALS

Art. no.	Thread
1132.0252	24 mm
1132.1012	28 mm
1134.0252	24 mm
1134.1012	28 mm
1135.1000	45 mm
1136.1000	DIN 45
1136.2500	DIN 45
1136.2511	DIN 45
1136.5000	DIN 51
1136.9025	2" + ¾"
1136.9050	2"
1136.9200	2" + ¾"
1137.0252	24 mm
1137.1012	28 mm
1138.2500	45 mm
1138.5000	45 mm
1138.9025	60 mm
1139.0500	45 mm
1140.0252	24 mm
1140.1012	28 mm
1143.1000	45 mm
1145.2500	DIN 45
1146.0250	DIN 45
1147.1000	DIN 45
1147.2500	DIN 45
1150.1000	25 mm
1150.5000	45 mm
1150.9010	45 mm
1150.9025	61 mm
1151.0500	45 mm
1155.9200	2" + ¾"
1156.2500	32 mm
1157.1000	DIN 45
1157.5000	DIN 51
1157.9025	DIN 61
1159.0100	DIN 32
1160.9180	2" + ¾"
1161.1012	GL45
1162.1000	DIN 45
1162.2500	DIN 45
1164.1000	DIN 45

Art. no.	Thread
1164.2500	DIN 45
1165.1012	GL45
1167.1012	GL45
1169.0500	45 mm
1171.1000	DIN 45
1176.1000	DIN 45
1176.5000	DIN 54
1176.9025	2" + ¾"
1178.1000	DIN 45
1178.2500	DIN 45
1179.1000	DIN 45
1179.2500	DIN 45
1180.1000	DIN 45
1182.2500	DIN 45
1182.5000	DIN 51
1182.9025	2" + ¾"
1184.1000	25 mm
1184.9025	61 mm
1185.1000	DIN 45
1185.2500	DIN 45
1186.2500	45 mm
1186.9025	2" + ¾"
1188.1000	DIN 45
1188.2500	DIN 45
1194.1000	DIN 47
1194.2500	DIN 48
1194.5000	DIN 49
1194.9025	DIN 50
1197.1000	DIN 52
1197.5000	RD 45 mm
1197.9010	RD 45 mm
1197.9025	2" + ¾"
1198.2511	DIN 53
1199.1000	DIN 54
1199.1009	28 mm
1199.5000	DIN 55
1205.0025	35 mm
1230.5000	DIN 51
1300.1011	GL 45
1305.1000	DIN 45
1305.2500	DIN 45

Art. no.	Thread
1306.9076	Nr. 71
1307.0500	DIN 54
1307.1000	DIN 54
1307.5000	DIN 80
1308.0100	DIN 32
1309.0500	DIN 54
1309.1000	DIN 54
1310.1000	DIN 54
1310.5000	DIN 80
1311.1000	DIN 54
1312.1011	GL 45
1313.0250	DIN 45
1313.1000	DIN 54
1315.1000	DIN 45
1316.0100	DIN 32
1319.1000	DIN 54
1321.1011	GL 45
1322.1000	DIN 54
1322.5000	DIN 80
1324.9030	Nr. 61
1328.1000	DIN 54
1329.0500	DIN 54
1329.1000	DIN 54
1331.1000	DIN 45
1331.9510	60 mm
1333.1000	DIN 45
1334.1000	DIN 54
1335.1000	DIN 45
1338.0025	35 mm
1340.1000	DIN 45
1340.9510	60 mm
1342.1000	DIN 54
1344.1000	DIN 54
1346.1000	DIN 54
1347.0100	DIN 32
1347.1000	DIN 54
1348.1000	DIN 54
1348.5000	DIN 80
1350.1000	DIN 45
1353.1000	DIN 54
1354.1000	DIN 54

Art. no.	Thread
1356.1000	DIN 45
1356.9510	60 mm
1357.1000	DIN 54
1357.5000	DIN 80
1359.0100	DIN 32
1359.0500	DIN 54
1365.1000	DIN 54
1367.1000	DIN 54
1367.5000	RD 80
1369.1000	DIN 45
1373.0500	DIN 54
1373.1000	DIN 54
1374.1011	GL45
1376.9010	Nr. 51
1377.0100	DIN 32
1377.1000	DIN 54
1379.0250	DIN 45
1381.2511	DIN 45
1382.0500	DIN 54
1382.2500	DIN 80
1383.1000	DIN 54
1384.1000	DIN 54
1384.5000	DIN 80
1385.0500	DIN 54
1385.1000	DIN 54
1386.0100	DIN 32
1388.0500	DIN 54
1388.1000	DIN 54
1389.0025	DIN 32
1389.0100	DIN 32
1391.9025	DIN 61
1393.1000	DIN 54
1393.2500	DIN 80
1394.0250	DIN 45
1394.1000	DIN 54
1400.1000	DIN 45
1400.2500	DIN 45
1405.1000	DIN 54
1410.0100	DIN 32
1411.5000	DIN 45
1413.1000	DIN 45

THREAD SIZES OF OUR PACKAGING FOR CHEMICALS

Art. no.	Thread
1415.5000	45 mm
1418.0250	DIN 45
1418.1000	DIN 54
1420.0250	DIN 45
1420.1000	DIN 54
1420.5000	DIN 80
1423.1000	DIN 54
1423.5000	DIN 80
1424.2500	DIN 45
1428.1000	DIN 45
1428.2500	DIN 45
1437.1011	DIN 45
1437.2511	DIN 45
1437.9025	DIN 61
1437.9050	2" + 3/4"
1442.1000	GL45
1442.2500	GL45
1443.1000	DIN 45
1443.2500	DIN 45
1448.1000	DIN 45
1448.2500	DIN 45
1451.1000	DIN 45
1451.2500	DIN 45
1455.2500	DIN 45
1459.1000	DIN 45
1459.2500	DIN 45
1462.1011	DIN 45
1462.2511	DIN 45
1462.9025	DIN 61
1464.1000	DIN 45
1464.2500	DIN 45
1471.1000	DIN 45
1471.2500	DIN 45
1474.2500	DIN 45
1481.1000	DIN 45
1481.2500	DIN 45
1483.1000	DIN 45
1485.1000	DIN 45
1485.2500	DIN 45
1487.1000	DIN 54
1505.0100	45 mm
1544.1000	DIN 54
1565.0500	GL45
1570.0500	DIN 45 E
1572.0500	GL45
1573.0500	GL45
1575.0500	DIN 45 E
1575.1011	GL45
1580.0500	DIN 45 E
1602.1000	DIN 45
1604.1000	DIN 45
1608.1000	GL45
1609.0100	DIN 32
1609.0500	DIN 54
1610.0250	DIN 45
1610.1000	DIN 54
1611.1000	DIN 45
1612.1011	GL 45
1613.1000	DIN 54
1616.1000	55,2 mm
1616.5000	38 mm
1618.0250	DIN 45
1619.1000	DIN 45 E
1619.5000	38 mm
1621.1000	DIN 54
1622.0500	DIN 54
1625.1000	DIN 45
1627.0100	DIN 32
1627.1000	DIN 54
1630.1000	DIN 54
1632.0500	DIN 54
1632.1000	DIN 54
1633.1000	DIN 45 E
1634.1000	DIN 54
1634.5000	DIN 80
1636.1000	DIN 54
1648.0250	DIN 45
1648.1000	DIN 54
1648.5000	DIN 80
1655.1000	DIN 54
1655.5000	DIN 80
1660.0500	DIN 54
1661.1000	DIN 54
1662.1000	GL45
1663.1000	DIN 45
1665.1000	63 mm
1669.0100	DIN 32
1672.0500	DIN 54
1673.1000	DIN 54
1675.1000	DIN 45
1675.2500	DIN 45
1678.1000	DIN 54
1678.5000	DIN 80
1679.0250	DIN 45
1681.1000	DIN 54
1681.5000	DIN 80
1683.0500	DIN 54
1683.1000	DIN 54
1683.5000	DIN 80
1685.1000	DIN 54
1688.0100	DIN 32
1689.0500	DIN 54
1689.1000	DIN 54
1690.1000	DIN 45
1690.2500	DIN 45
1695.1000	DIN 54
1697.1000	DIN 54
1697.5000	DIN 80
1715.1000	DIN 45
1715.2500	DIN 45
1802.2500	DIN 45
1805.1000	DIN 45
1805.2500	DIN 45
1807.2500	DIN 45
1810.1000	DIN 45
1817.2500	DIN 45
1831.1000	DIN 45
1857.1000	DIN 45
1857.2500	DIN 45
1870.1000	DIN 45
1873.1000	DIN 45
1873.2500	DIN 45
1900.1000	DIN 45
1905.0025	DIN 45
1906.0025	35 mm
1907.2500	DIN 45
1909.0100	24 mm
1909.0500	DIN 45
1929.1000	DIN 45
1929.2500	DIN 45
1929.9025	2" + 3/4"
1935.1000	DIN 45
1948.1000	DIN 45
1948.2500	DIN 45
1948.9025	2" + 3/4"
1964.1000	DIN 45
1964.2500	DIN 45
1966.9200	2" + 3/4"
1968.2500	DIN 45
1973.1000	DIN 45
1973.2500	DIN 45
1973.4000	DIN 45
1975.5011	42 mm
1980.1000	DIN 45
1980.2500	DIN 45
2039.1000	DIN 45
2050.1011	DIN 45
2134.5000	DIN 45
2135.1000	28 mm
2135.5000	DIN 45
2135.9010	DIN 51
2137.1011	DIN 45
2137.2511	DIN 45
2137.9025	DIN 61
2140.1000	DIN 45
2140.5000	DIN 45
2163.1000	DIN 45
2163.2500	DIN 45
2170.1000	DIN 45
2175.1000	DIN 45
2200.1011	GL45
2202.1000	25 mm
2202.5000	45 mm
2202.9010	45 mm

THREAD SIZES OF OUR PACKAGING FOR CHEMICALS

Art. no.	Thread
2202.9025	61 mm
2202.9200	2" + ¾"
2203.1000	25 mm
2203.5000	45 mm
2204.1000	DIN 45
2204.5000	DIN 45
2205.2510	DIN 45
2206.5000	DIN 51
2206.6025	57 Balg
2206.9010	DIN 51
2206.9025	DIN 51
2207.1000	DIN 45
2207.5000	42 mm
2209.1000	K 5446 Menshen
2209.5000	RD 45
2209.9010	RD 45
2209.9025	DIN 60
2209.9200	2" + ¾"
2210.1000	DIN 45
2211.1000	K 5446 Menshen
2211.5000	RD 45
2211.9010	RD 45
2211.9025	DIN 60
2212.5000	DIN 45
2212.6025	DIN 57
2212.9010	DIN 51
2212.9025	DIN 51
2213.1000	DIN 45 E
2214.1011	GL45
2216.1000	DIN 54
2217.0250	DIN 45
2217.1000	DIN 54
2219.1000	DIN 45
2219.2500	DIN 45
2220.1011	GL 45
2222.1000	DIN 45
2222.2500	DIN 45
2230.0100	20 mm
2236.0500	25 mm
2236.1000	25 mm
2236.2500	DIN 45

Art. no.	Thread
2237.1000	DIN 45
2237.2500	DIN 45
2239.0500	DIN 45 E
2239.1000	DIN 45 E
2241.1000	DIN 54
2244.2500	DIN 45
2246.1000	DIN 45
2246.2500	DIN 45
2246.5000	42 mm
2246.9025	48 mm
2247.1000	45 mm
2248.5000	DIN 51
2250.1000	DIN 45
2250.2500	DIN 45
2253.9045	Nr. 71
2254.0250	DIN 45
2254.1000	DIN 54
2257.2500	DIN 45
2257.2511	DIN 45
2257.5000	50 mm
2258.1000	DIN 54
2262.2511	45 mm
2265.0100	20 mm
2267.9200	2" + ¾"
2268.2511	DIN 45
2269.1000	DIN 45
2273.1000	DIN 45
2273.2500	DIN 45
2273.5000	42 mm
2273.9025	48 mm
2274.1000	DIN 54
2276.0100	DIN 32
2276.1000	DIN 54
2276.5000	DIN 80
2278.1000	DIN 45
2279.2500	DIN 45
2281.1000	DIN 54
2282.9025	DIN 61
2284.1000	DIN 45
2286.1000	DIN 45
2286.2500	DIN 45

Art. no.	Thread
2286.5000	42 mm
2286.9025	48 mm
2289.1000	45 mm
2290.1000	DIN 45
2290.2500	DIN 45
2296.2500	DIN 45
2302.9025	60 mm
2304.9025	60 mm
2310.0005	28 mm
2311.2500	DIN 45
2314.1000	DIN 45
2314.5000	42 mm
2320.2500	DIN 45
2322.1000	DIN 45
2325.1000	DIN 45
2327.1000	DIN 45
2333.2500	DIN 45
2340.1000	DIN 45
2343.1000	DIN 45
2347.1000	DIN 45
2348.1000	DIN 45
2350.1000	DIN 45
2351.1000	DIN 45
2353.1000	DIN 45
2353.2500	DIN 45
2356.1000	DIN 45
2356.2500	DIN 45
2358.1000	DIN 45
2359.1000	DIN 45
2361.1000	DIN 45
2362.1000	DIN 45
2362.2500	DIN 45
2362.5000	DIN 45
2363.2500	DIN 45
2365.1000	DIN 45
2368.1000	DIN 45
2371.1000	DIN 45
2371.2500	DIN 45
2371.9025	2" + ¾"
2373.1000	DIN 45
2376.2500	DIN 45

Art. no.	Thread
2380.1000	DIN 45
2380.2500	DIN 45
2384.1000	DIN 45
2385.2500	DIN 45
2385.5000	42 mm
2403.0500	DIN 54
2403.1000	DIN 54
2404.5000	42 mm
2405.1000	DIN 54
2406.5000	42 mm
2407.1000	DIN 54
2414.1000	DIN 54
2417.1000	DIN 54
2419.1011	GL 45
2420.1000	DIN 54
2424.9010	Nr. 51
2425.9025	Nr. 61
2425.910000	150 mm + 50 mm
2427.2500	DIN 45
2429.2500	DIN 45
2432.1000	DIN 54
2435.1000	DIN 54
2440.0001	Opening 120 mm
2442.0100	DIN 32
2445.0500	DIN 54
2445.1000	DIN 54
2448.2500	DIN 45
2455.1000	DIN 45
2455.2500	DIN 45
2461.0500	DIN 54
2461.1000	DIN 54
2461.2500	DIN 80
2467.1000	DIN 45
2467.2500	DIN 45
2475.1000	DIN 45
2475.2500	DIN 45
2475.9025	2" + ¾"
2476.2500	DIN 45
2479.1000	DIN 54
2483.1000	DIN 45
2483.2500	DIN 45

THREAD SIZES OF OUR PACKAGING FOR CHEMICALS

Art. no.	Thread
2484.2500	DIN 45
2485.0500	DIN 54
2489.1000	DIN 45
2489.2500	DIN 45
2495.1000	DIN 54
2497.1000	DIN 45
2502.0500	DIN 54
2502.1000	DIN 54
2507.1000	DIN 54
2510.1000	DIN 45
2513.1000	DIN 45
2513.2500	DIN 45
2514.1011	GL 45
2515.0500	DIN 54
2515.1000	DIN 54
2521.1000	DIN 45
2524.1000	DIN 45
2524.2500	DIN 45
2529.1000	DIN 45
2529.2500	DIN 45
2544.5000	38 mm
2544.9010	60 mm
2545.5000	38 mm
2550.9010	DIN 51
2555.5000	DIN 51
2557.5000	DIN 51
2563.1000	DIN 54
2568.2500	DIN 45
2581.2500	DIN 45
2581.5000	50 mm
2585.1000	DIN 45
2588.1000	DIN 45
2605.1000	DIN 54
2606.1000	DIN 45
2609.0500	DIN 54
2609.1000	DIN 54
2609.5000	DIN 80
2616.1000	DIN 54
2616.5000	DIN 80
2617.1000	GL45
2618.0250	DIN 45

Art. no.	Thread
2618.1000	DIN 54
2620.1000	DIN 54
2622.5000	DIN 80
2626.1000	DIN 45
2626.2500	DIN 45
2630.5000	DIN 51
2632.5000	50 mm
2637.1000	DIN 45
2637.2500	DIN 45
2642.1000	DIN 54
2645.2500	DIN 45
2647.1000	45 mm
2647.2500	32 mm
2647.5000	36 mm
2647.9025	58 mm
2649.9200	2" + ¾"
2651.0500	DIN 54
2653.1000	DIN 45
2653.2500	DIN 45
2654.1000	45 mm
2654.2500	32 mm
2654.5000	45 mm
2654.5010	36 mm
2654.9025	58 mm
2655.0500	DIN 54
2659.1000	DIN 45
2659.5000	DIN 51
2659.6025	2" + ¾"
2659.9025	DIN 61
2661.1000	DIN 45
2661.2500	DIN 45
2666.1000	DIN 45
2666.5000	42 mm
2667.1000	DIN 54
2668.1000	DIN 54
2670.5000	45 mm
2672.1011	DIN 45
2672.2511	DIN 45
2672.5000	DIN 51
2672.9025	DIN 61
2676.2500	DIN 45

Art. no.	Thread
2678.1000	DIN 54
2679.5000	DIN 45
2680.9200	2" + ¾"
2685.1000	DIN 45
2685.2500	DIN 45
2690.1000	DIN 45
2690.2500	DIN 45
2692.5000	42 mm
2694.1011	DIN 45
2697.1000	DIN 45
2697.2500	DIN 45
2699.0500	DIN 60
2749.0500	45 mm
2753.0500	45 mm
2761.0250	25 mm
2761.0500	45 mm
2761.1011	45 mm
2763.0250	25 mm
2763.0500	GL45
2766.1000	45 mm
2776.0500	45 mm
2779.1000	45 mm
2781.0100	26 mm
2793.0500	45 mm
2794.0125	22 mm
2794.0250	22 mm
3010.1000	GL45
3015.0500	GL45
3020.1000	GL45
3030.1000	GL45
3035.9010	60 mm
3043.0500	GL45
3045.9010	60 mm
3050.1000	GL45
3055.1000	GL45
3060.1000	GL45
3080.1000	GL45
3082.1000	GL45
3084.1000	GL45
8085.0500	54 mm
8085.1000	80 mm

Art. no.	Thread
8614.0500	DIN 54
8622.0500	DIN 54
8622.1000	DIN 54
8622.2500	DIN 80
8622.5000	DIN 80
8630.1000	DIN 54
8630.5000	DIN 80
8690.0250	45 mm
8694.1000	DIN 54
8694.2500	DIN 80
8773.0500	DIN 54
8773.1000	DIN 80
9128.0500	DIN 54
9366.1000	80 mm
9375.0250	DIN 45
9715.0100	DIN 32
DG10185.5000	Opening Nr. 61
DG10190.2500	DIN 45
DG1250.9008	Opening Nr. 61
DG1250.9095	Opening Nr. 61
DG8015.9020	Opening Nr. 61

NUMERICAL INDEX

Art. no.	Page
105.0250	171
105.1000	171
110.1000	172
110.9025	172
112.1000	171
117.1000	172
120.1011	189
123.1000	173
129.0100	173
133.0100	162
133.0250	162
300.1000	170
312.1000	170
320.5000	171
360.1000	170
360.2500	170
360.5000	170
360.9010	170
360.9023	170
370.90175	169
370.9026	169
371.5000	169
399.2500	170
399.5000	170
400.0511	86
400.1011	86
400.2511	86
405.5000	167
410.9020	85
418.1000	168
418.2500	168
430.9010	168
435.1000	167
437.1011	86
445.9030	85
452.2511	86
455.1000	168
455.2500	168
456.1000	169
456.2500	169
464.5000	166
469.5000	167
469.9010	167
470.1000	168
470.2500	168
476.1011	86
476.2511	86
480.1000	166
480.5000	166
480.9010	166
480.9020	166
600.0100	166
600.1000	166
697.2500	108
704.2500	163
707.2500	164
710.2500	161
715.2500	164
726.0250	200
728.1000	161
728.2500	161
733.2500	163
739.2500	164
740.0500	163
741.2500	161
741.9025	161
743.0500	163
752.1000	164
752.2500	164
752.8025	164
752.9025	164
752.9200	164
760.1000	165
768.2500	164
769.0025	34
774.1000	162
774.2500	162
775.1000	162
797.1000	162
797.2500	162
803.1011	184
804.1000	138
804.9025	138
807.1000	80
808.1011	178
810.2500	79
811.1000	185
811.2500	185
814.0001	191
815.1000	188
815.5000	188
819.1011	179
820.2511	80
821.5011	179
822.2500	159
824.1011	179
824.2511	179
824.9010	179
824.9025	179
825.2511	81
826.1011	180
827.1011	111
827.2511	111
829.2500	160
831.2500	157
832.0001	191
835.0001	191
836.1000	82
836.2500	82
836.2511	82
836.5000	82
836.9020	82
838.1011	112
838.2500	112
839.2511	79
839.5000	79
839.9010	79
839.9025	79
840.0001	192
841.1000	178
841.5000	178
841.5011	178
841.9510	178
845.1000	178
845.5000	178
848.0001	194
849.1000	157
850.1000	178
850.5000	178
850.9510	178
855.1000	188
855.5000	188
855.9510	188
857.1011	83
859.1000	158
859.2500	158
860.1000	179
861.0001	192
862.1011	177
862.2511	177
863.1011	159
865.1000	111
865.2500	111
865.5000	111
865.9200	111
868.2511	85
869.5000	79
869.9010	79
869.9025	79
870.1011	84
871.1000	82
871.2500	82
871.2511	82
874.1000	158
874.2500	158
874.5000	158
874.9025	158
875.0001	196
878.0050	139
878.0250	139
881.1000	184
881.5000	184
881.9011	184
884.1011	158
887.0100	139
889.2511	80
889.5000	80
889.9010	80
892.1011	81
892.2500	81
892.2511	81
892.9025	81
895.0001	196
898.9070	157
990.0010	137
1008.0050	99
1024.1000	181
1024.2500	181
1048.0250	100
1100.1000	114
1100.2500	114
1101.0500	214
1103.1000	212
1105.0025	115
1107.0025	116
1107.0100	116
1109.1000	118
1111.1000	212
1112.1000	212
1113.1000	212
1114.1000	212
1114.5000	212
1115.1000	213
1116.1000	213
1117.1000	213
1117.5000	213
1118.1000	213
1119.1000	213
1119.5000	213
1120.1000	213
1120.5000	213
1121.1000	213
1122.0500	214
1123.0252	210
1124.1000	211

Art. no.	Page
1125.0252	210
1125.1012	210
1126.1012	211
1127.1000	211
1128.0252	211
1128.1012	211
1129.1000	211
1130.1000	212
1131.0252	211
1131.1012	211
1132.0252	211
1132.1012	211
1134.0252	210
1134.1012	210
1135.1000	212
1136.1000	133
1136.2500	133
1136.2511	133
1136.5000	133
1136.9025	133
1136.9050	133
1136.9200	133
1137.0252	210
1137.1012	210
1138.2500	135
1138.5000	135
1138.9025	135
1139.0500	214
1140.0252	210
1140.1012	210
1143.1000	212
1145.2500	118
1146.0250	96
1147.1000	115
1147.2500	115
1148.2500	114
1149.2500	115
1150.1000	60
1150.1000	132
1150.5000	60
1150.5000	132

Art. no.	Page
1150.9010	60
1150.9010	132
1150.9025	60
1150.9025	132
1151.0500	214
1152.2500	117
1155.2511	132
1156.1000	119
1156.2500	119
1157.1000	132
1157.5000	132
1157.9025	132
1159.0100	96
1160.1000	114
1160.2500	114
1160.9180	114
1161.1012	214
1162.1000	137
1162.2500	137
1164.1000	134
1164.2500	134
1165.0252	214
1165.1012	214
1167.0252	214
1167.1012	214
1168.2000	113
1169.0500	214
1171.1000	181
1173.0252	215
1173.1012	215
1175.9150	132
1176.1000	117
1176.5000	117
1176.9025	117
1177.1000	116
1177.2500	116
1178.1000	134
1178.2500	134
1179.1000	134
1179.2500	134
1180.1000	131

Art. no.	Page
1182.2500	133
1182.5000	133
1182.9025	133
1184.1000	132
1184.9025	132
1185.1000	118
1185.2500	118
1186.2500	118
1188.1000	131
1188.2500	131
1194.1000	117
1194.2500	117
1194.5000	117
1194.9025	117
1196.0050	113
1197.1000	133
1197.5000	133
1197.9010	133
1197.9025	133
1197.9200	133
1198.2511	119
1199.1000	132
1199.1009	132
1199.5000	132
1205.0025	112
1220.0100	113
1220.1000	113
1220.2500	113
1230.5000	181
1250.0001	193
1300.1011	187
1304.2511	150
1304.5000	150
1304.9010	150
1304.9020	150
1304.9025	150
1304.9800	150
1305.1000	151
1305.2500	151
1307.0500	140
1307.1000	140

Art. no.	Page
1307.5000	140
1308.0100	144
1309.0500	152
1309.1000	152
1309.9025	152
1310.1000	148
1310.2500	148
1310.5000	148
1311.1000	142
1312.1011	188
1313.0250	146
1313.1000	146
1314.5000	148
1315.1000	150
1316.0100	144
1319.1000	146
1321.1011	185
1322.1000	140
1322.5000	140
1324.9030	149
1325.0001	195
1327.1000	154
1327.5000	154
1328.1000	144
1329.0500	147
1329.1000	147
1329.2500	147
1331.1000	185
1331.5000	185
1331.9510	185
1332.0001	195
1333.1000	186
1334.1000	141
1335.1000	186
1335.5000	186
1337.1000	155
1338.0025	110
1340.1000	186
1340.5000	186
1340.9510	186
1341.0001	195

Art. no.	Page
1342.1000	152
1344.1000	110
1346.1000	145
1347.0100	146
1347.1000	146
1348.1000	153
1348.5000	153
1349.1000	148
1350.1000	187
1353.1000	156
1354.1000	151
1354.9025	151
1355.1000	149
1355.5000	149
1356.1000	187
1356.5000	187
1356.9510	187
1357.1000	145
1357.5000	145
1359.0100	152
1359.0500	152
1365.1000	110
1367.1000	143
1367.5000	143
1367.9025	143
1369.1000	187
1371.0001	195
1372.1000	149
1372.5000	149
1373.0500	145
1373.1000	145
1373.9025	145
1374.1011	185
1376.9010	149
1377.0100	151
1377.1000	151
1379.0250	156
1381.2511	150
1382.0500	154
1382.2500	154
1383.1000	153

NUMERICAL INDEX

Art. no.	Page
1384.1000	155
1384.5000	155
1385.0500	155
1385.1000	155
1385.9010	155
1386.0100	141
1387.0001	196
1388.0500	157
1388.1000	157
1389.0025	153
1389.0100	153
1391.9025	150
1393.1000	142
1393.2500	142
1394.0250	154
1394.1000	154
1398.1011	185
1399.5000	143
1399.9025	143
1400.1000	100
1400.2500	100
1400.5011	100
1405.1000	97
1410.0100	98
1411.5000	100
1413.1000	105
1415.5000	107
1418.0250	99
1418.1000	99
1420.0250	97
1420.1000	97
1420.5000	97
1423.1000	98
1423.5000	98
1428.1000	102
1428.2500	102
1430.1000	36
1430.2500	36
1430.9025	36
1433.0250	109
1433.1000	109

Art. no.	Page
1437.1011	101
1437.2511	101
1437.9025	101
1437.9050	101
1442.1000	108
1442.2500	108
1443.1000	105
1443.2500	105
1444.0250	109
1444.1000	109
1448.1000	102
1448.2500	102
1451.1000	103
1451.2500	103
1455.2500	102
1459.1000	101
1459.2500	101
1462.1011	101
1462.2511	101
1462.9025	101
1462.9200	101
1464.1000	106
1464.2500	106
1471.1000	106
1471.2500	106
1474.1000	107
1474.2500	107
1481.1000	102
1481.2500	102
1483.1000	107
1485.1000	103
1485.2500	103
1487.1000	98
1505.0100	95
1544.1000	96
1565.0500	220
1570.0500	220
1571.0250	220
1572.0500	221
1573.0500	221
1575.0500	221

Art. no.	Page
1575.1011	221
1580.0500	221
1602.1000	182
1602.2511	182
1604.1000	182
1605.1000	138
1605.2500	138
1606.0001	193
1608.1000	183
1609.0100	123
1609.0500	123
1610.0250	122
1610.1000	122
1611.1000	183
1612.1011	183
1613.1000	120
1614.5000	126
1616.1000	138
1616.5000	138
1616.9025	138
1618.0250	127
1619.1000	219
1619.5000	219
1620.1000	138
1621.1000	129
1622.0500	123
1625.1000	183
1626.1000	138
1627.0100	124
1627.1000	124
1630.1000	122
1630.9020	122
1632.0500	121
1632.1000	121
1632.5000	121
1633.1000	219
1634.1000	123
1634.5000	123
1636.1000	127
1639.0001	190
1640.0500	92

Art. no.	Page
1640.1000	92
1641.0500	92
1641.1000	92
1642.0500	92
1642.1000	92
1643.0500	92
1643.1000	92
1644.0500	93
1644.1000	93
1645.0500	93
1645.1000	93
1647.0001	193
1648.0250	121
1648.1000	121
1648.5000	121
1649.0500	93
1649.1000	93
1650.0500	93
1650.1000	93
1651.0500	94
1651.1000	94
1652.0500	94
1652.1000	94
1653.0500	94
1653.1000	94
1654.0500	94
1654.1000	94
1655.1000	125
1655.5000	125
1656.0500	95
1656.1000	95
1658.0500	95
1658.1000	95
1659.0001	194
1660.0500	125
1661.1000	124
1662.1000	184
1663.1000	182
1665.1000	129
1667.0001	193
1669.0100	120

Art. no.	Page
1671.0001	194
1672.0500	126
1673.1000	124
1675.1000	184
1675.2500	184
1678.1000	128
1678.5000	128
1679.0250	130
1681.1000	125
1681.5000	125
1683.0500	129
1683.1000	129
1683.5000	129
1685.1000	128
1686.0001	194
1688.0100	127
1689.0500	128
1689.1000	128
1690.1000	47
1690.2500	47
1691.0001	192
1694.9010	126
1695.1000	130
1697.1000	130
1697.5000	130
1699.1000	122
1715.1000	104
1715.2500	104
1754.9205	120
1802.2500	91
1802.4000	91
1805.1000	180
1805.2500	180
1807.2500	91
1810. 1000	188
1813.1000	91
1813.2500	91
1817.2500	90
1823.0001	192
1831.1000	89
1857.1000	91

Art. no.	Page
1857.2500	91
1870.1000	90
1873.1000	104
1873.2500	104
1878.2500	92
1900.1000	75
1905.0025	78
1906.0025	76
1907.2500	76
1909.0100	77
1909.0500	77
1929.1000	78
1929.2500	78
1929.9025	78
1935.1000	75
1948.1000	75
1948.2500	75
1948.9025	75
1964.1000	78
1964.2500	78
1966.9200	75
1968.2500	76
1973.1000	78
1973.2500	78
1975.5011	77
1978.2500	76
1980.1000	77
1980.2500	77
2036.1000	74
2039.1000	73
2039.9025	73
2050.1011	74
2100.9010	71
2107.0500	97
2107.9010	97
2107.9020	97
2134.5000	70
2135.1000	71
2135.5000	71
2135.9010	71
2137.1011	71
2137.2511	71
2137.9025	71
2140.1000	72
2140.5000	72
2163.1000	66
2163.2500	66
2170.1000	66
2175.1000	69
2200.1011	177
2202.1000	64
2202.5000	64
2202.9010	64
2202.9025	64
2202.9200	64
2203.1000	64
2203.5000	64
2204.1000	177
2204.5000	177
2206.5000	64
2206.6025	64
2206.9010	64
2206.9025	64
2207.1000	59
2207.1000	60
2207.5000	59
2207.5000	60
2209.1000	63
2209.5000	63
2209.9010	63
2209.9025	63
2209.9200	63
2210.1000	16
2211.1000	63
2211.5000	63
2211.9010	63
2211.9025	63
2212.5000	65
2212.6025	65
2212.9010	65
2212.9025	65
2213.1000	220
2214.1011	177
2214.5011	177
2216.1000	69
2216.5000	69
2217.0250	88
2217.1000	88
2219.1000	68
2219.2500	68
2220.1011	177
2222.1000	62
2222.2500	62
2230.0100	219
2236.0500	64
2236.1000	64
2236.2500	64
2237.1000	68
2237.2500	68
2239.0500	220
2239.1000	220
2241.1000	88
2242.5011	67
2243.0001	190
2244.2500	61
2246.1000	62
2246.2500	62
2246.5000	62
2246.9025	62
2247.1000	220
2248.5000	66
2249.9010	16
2250.1000	16
2250.2500	16
2252.9157	65
2254.0250	87
2254.1000	87
2254.9025	87
2255.1000	65
2255.2500	65
2255.5000	65
2257.2500	67
2257.2511	67
2257.5000	67
2258.1000	87
2259.1000	63
2259.1000	104
2259.9010	63
2259.9010	104
2262.2511	62
2264.0001	190
2265.0100	219
2268.2511	14
2269.1000	70
2272.1011	15
2273.1000	61
2273.2500	61
2273.5000	61
2273.9025	61
2274.1000	88
2276.0100	89
2276.1000	89
2276.5000	89
2277.1000	198
2277.2500	198
2278.1000	68
2279.2500	68
2281.1000	69
2282.9025	70
2283.1000	67
2283.2500	67
2284.1000	180
2286.1000	61
2286.2500	61
2286.5000	61
2286.9025	61
2290.1000	15
2290.2500	15
2290.9030	15
2291.0001	191
2296.2500	14
2303.1000	55
2303.2500	55
2308.0100	57
2309.9140	53
2310.0001	58
2310.0005	58
2311.2500	51
2314.1000	59
2314.5000	59
2320.2500	55
2322.1000	54
2325.1000	49
2327.1000	56
2330.1000	50
2331.1000	49
2333.2500	51
2335.1000	49
2340.1000	52
2343.1000	52
2347.1000	57
2347.9200	57
2348.1000	51
2349.1000	54
2350.1000	56
2351.1000	54
2353.1000	58
2353.2500	58
2356.1000	50
2356.2500	50
2358.1000	52
2359.1000	56
2361.1000	52
2362.1000	53
2362.2500	53
2362.5000	53
2362.9140	53
2363.2500	55
2365.1000	57
2367.1000	53
2368.1000	53
2371.1000	50
2371.2500	50
2371.9025	50
2373.1000	58

Art. no.	Page
2376.2500	56
2380.1000	57
2380.2500	57
2384.1000	51
2385.2500	55
2403.0500	41
2403.1000	41
2405.1000	38
2407.1000	43
2410.0001	14
2414.1000	39
2417.1000	43
2419.1011	176
2420.1000	46
2425.9025	44
2427.2500	43
2429.2500	48
2432.1000	44
2435.1000	46
2440.0001	14
2442.0100	45
2445.0500	40
2445.1000	40
2448.2500	48
2449.2500	42
2450.0001	14
2455.1000	47
2455.2500	47
2455.9010	47
2461.0500	39
2461.1000	39
2461.2500	39
2467.1000	41
2467.2500	41
2475.1000	42
2475.2500	42
2475.9025	42
2476.2500	42
2479.1000	46
2481.9200	42
2483.1000	47
2483.2500	47
2485.0500	45
2489.1000	48
2489.2500	48
2495.1000	40
2497.1000	48
2502.0500	32
2502.1000	32
2507.1000	31
2509.1000	32
2509.2500	32
2510.1000	33
2513.1000	35
2513.2500	35
2514.1011	180
2515.0500	32
2515.1000	32
2521.1000	33
2524.1000	38
2524.2500	38
2529.1000	38
2529.2500	38
2540.2500	37
2544.5000	35
2544.9010	35
2545.5000	35
2550.9010	35
2557.5000	34
2563.1000	34
2563.2500	34
2568.2500	37
2581.2500	37
2581.5000	37
2585.1000	36
2588.1000	36
2593.2500	37
2595.1000	176
2605.1000	25
2606.1000	23
2607.0025	33
2609.0500	28
2609.1000	28
2609.5000	28
2613.1000	31
2616.1000	30
2616.5000	30
2617.1000	176
2618.0250	26
2618.1000	26
2618.9025	26
2619.0001	190
2620.1000	24
2622.5000	27
2626.1000	19
2626.2500	19
2626.4000	19
2630.5000	108
2632.5000	20
2635.9025	30
2637.1000	21
2637.2500	21
2641.1000	21
2642.1000	31
2645.2500	23
2647.1000	18
2647.2500	18
2647.5000	18
2647.9025	18
2649.2500	21
2649.9200	21
2651.0500	26
2653.1000	22
2653.2500	22
2654.1000	18
2654.2500	18
2654.5000	18
2654.5010	18
2654.9025	18
2655.0500	27
2659.1000	17
2659.2511	17
2659.5000	17
2659.6025	17
2659.9010	17
2659.9025	17
2661.1000	19
2661.2500	19
2661.4000	19
2666.1000	17
2666.5000	17
2667.1000	28
2668.1000	25
2670.2500	20
2670.5000	20
2672.1011	29
2672.2511	29
2672.5000	29
2672.9025	29
2676.2500	19
2677.2511	17
2678.1000	27
2679.5000	29
2680.5000	19
2680.9200	19
2683.2500	30
2685.1000	22
2685.2500	22
2689.1000	26
2690.1000	23
2690.2500	23
2692.5000	21
2693.2511	18
2693.5000	18
2693.9010	18
2694.1011	73
2697.1000	22
2697.2500	22
2698.9200	18
2699.0500	25
2714.0001	217
2717.0001	217
2730.0001	217
2740.0001	218
2749.0500	200
2753.0500	200
2760.0001	217
2761.0250	200
2761.0500	200
2761.1011	200
2763.0250	199
2763.0500	199
2766.1000	200
2770.0001	217
2776.0500	198
2779.1000	198
2779.2500	198
2781.0100	198
2790.0001	217
2791.0250	199
2793.0500	199
2794.0125	199
2794.0250	199
2811.0001	218
2811.0003	218
2814.0001	218
2814.0003	218
2864.2500	45
2891.1000	44
2891.5000	44
2895.0250	59
2895.5000	59
2915.0001	218
2920.0001	218
2925.0001	218
2930.0001	218
2935.0001	218
2940.0001	218
2950.0001	219
2955.0001	218
3005.0250	204
3010.1000	202
3015.0500	206
3020.1000	202
3030.1000	202

Art. no.	Page
3033.0250	204
3035.9010	202
3038.0250	204
3043.0500	204
3045.9010	203
3048.0384	205
3050.1000	203
3053.0384	205
3055.1000	203
3058.0384	205
3060.1000	203
3063.0384	205
3068.0384	206
3073.0384	206
3080.1000	203
3082.1000	203
3084.1000	202
3088.1000	202
3090.0001	219
3091.0001	219
3101.2500	17
3101.5000	17
3102.2500	131
3102.5000	131
6307.1000	143
6307.5000	143
6307.9025	143
6396.1000	155
6396.2500	155
6396.5000	155
6500.9025	136
6502.2511	135
6502.5000	135
6626.1012	210
6900.2511	160
7533.0500	266
7533.2000	266
7533.5000	266
7548.0500	267
7548.2000	267
7548.5000	267
7581.0500	266
7581.2000	266
7581.5000	266
7649.0500	265
7649.2000	265
7711.0500	169
7711.1000	169
7759.0500	265
7759.2000	265
7759.5000	265
7772.0500	264
7772.2000	264
7772.5000	264
7836.0500	264
7836.2000	264
7836.5000	264
7883.0500	263
8020.9010	166
8020.9025	166
8022.0500	165
8022.1000	165
8028.0500	279
8028.2000	279
8032.0500	262
8049.0500	258
8049.2000	258
8049.5000	258
8055.0100	275
8085.0500	165
8085.1000	165
8110.0100	74
8110.0100	271
8135.0500	254
8152.0500	256
8159.0500	254
8161.0030	255
8174.0500	256
8174.2000	256
8174.5000	256
8180.0500	257
8229.0500	253
8267.0500	252
8267.2000	252
8267.5000	252
8277.0025	137
8287.0500	241
8287.2000	241
8287.5000	241
8418.0012	208
8418.0100	208
8425.0500	250
8425.2000	250
8425.5000	250
8429.0500	247
8429.2000	247
8433.0010	136
8433.0025	136
8433.0050	136
8433.1100	136
8433.1500	136
8435.0100	208
8439.0010	274
8449.0500	248
8449.2000	248
8449.5000	248
8459.0500	250
8461.0005	208
8462.0005	208
8477.0010	275
8477.5000	275
8483.5000	116
8485.0500	242
8485.5000	242
8490.0500	278
8519.0500	247
8536.0500	234
8536.2000	234
8546.0500	246
8614.0500	156
8614.9025	156
8620.0500	234
8622.0500	147
8622.1000	147
8622.2500	147
8622.5000	147
8630.1000	147
8630.5000	147
8630.9025	147
8644.0500	249
8644.2000	249
8644.5000	249
8657.0500	245
8682.0009	249
8682.0010	249
8682.0090	249
8682.0100	249
8682.0200	249
8682.0225	249
8682.0300	249
8682.0450	249
8682.0800	249
8682.0900	249
8690.0250	141
8694.1000	140
8694.2500	140
8694.9025	140
8710.0500	244
8710.2000	244
8710.5000	244
8733.0500	244
8733.2000	244
8733.5000	244
8743.0500	242
8745.0500	278
8745.2000	278
8745.5000	278
8751.0010	273
8753.0500	240
8761.0500	243
8761.2000	243
8761.5000	243
8764.0500	241
8773.0500	109
8796.0500	240
8796.2000	240
8796.5000	240
8811.0500	238
8811.2000	238
8811.5000	238
8813.0500	238
8813.2000	238
8813.5000	238
8814.0010	273
8814.9010	273
8815.0010	273
8815.9010	273
8820.0010	272
8822.0500	237
8822.2000	237
8822.5000	237
8843.0500	236
8843.2000	236
8843.5000	236
8848.0500	235
8861.0005	272
8869.0500	235
8876.0500	236
8876.2000	236
8876.5000	236
8891.0500	237
8891.2000	237
8891.5000	237
8895.0500	251
8895.2000	251
8895.5000	251
8897.0010	270
8897.5000	270
8898.0010	270
8992.0500	251
8992.2000	251
8992.5000	251
9030.0009	231
9030.0100	231
9030.0300	231

NUMERICAL INDEX

Art. no.	Page
9030.0450	231
9030.0600	231
9030.0900	231
9032.0100	232
9032.0300	232
9032.0400	232
9032.0600	232
9032.0850	232
9036.0300	232
9036.0450	232
9099.3000	242
9099.5000	242
9128.0500	87
9132.0020	256
9134.0030	256
9156.0020	242
9160.0020	252
9161.0030	252
9162.0006	254
9164.0020	255
9166.0020	255
9168.0020	264
9170.0020	255
9177.0100	252
9225.0030	255
9230.0009	248
9230.0090	248
9230.0100	248
9230.0200	248
9230.0225	248
9230.0800	248
9240.2000	248
9240.3000	248
9240.5000	248
9246.0030	228
9248.0020	228
9250.0010	272
9254.0030	228
9263.0500	279
9263.2000	279
9263.2000	279

Art. no.	Page
9263.2000	279
9264.0500	226
9270.0100	241
9270.0200	241
9291.0020	257
9293.0030	257
9310.0100	250
9310.0200	250
9310.0450	250
9321.0030	260
9324.0030	262
9360.0100	237
9366.1000	74
9367.0200	251
9370.0020	239
9371.0020	244
9373.0100	246
9375.0250	73
9379.0200	243
9384.0020	243
9390.0020	246
9394.0020	245
9396.0015	245
9396.0200	245
9396.0450	245
9416.0030	264
9423.0020	225
9425.0100	225
9439.0500	233
9439.2000	233
9439.5000	233
9440.0009	231
9440.0090	231
9440.0100	231
9442.0010	271
9446.0100	240
9450.0100	240
9452.0020	240
9456.0030	240
9469.0009	242
9472.0100	242

Art. no.	Page
9480.0100	250
9480.0200	250
9480.0450	250
9487.0090	234
9487.0100	234
9489.0020	226
9526.0020	230
9535.0100	239
9551.0024	260
9557.0050	271
9557.0100	271
9557.0500	271
9561.0100	258
9561.0200	258
9561.0300	258
9561.0450	258
9561.0600	258
9571.0500	231
9577.0030	250
9578.0100	271
9578.0500	271
9585.0020	250
9589.0500	63
9589.1000	63
9591.0020	246
9594.0010	274
9595.0020	246
9595.0200	246
9627.0020	230
9632.0100	262
9632.0200	262
9643.0500	245
9643.2000	245
9643.5000	245
9649.0020	265
9650.0010	233
9650.0225	233
9653.2000	233
9653.3000	233
9653.5000	233
9654.0009	233

Art. no.	Page
9654.0225	233
9658.0010	253
9658.0090	253
9661.0500	259
9664.0020	238
9666.0030	263
9674.0100	254
9674.0200	254
9674.0400	254
9674.0450	254
9675.0100	255
9675.0200	255
9675.0475	255
9677.0500	230
9679.0100	253
9682.0100	228
9682.0200	228
9684.0020	262
9685.0500	230
9688.0015	262
9688.0100	262
9688.0200	262
9688.0450	262
9690.0060	260
9692.0100	259
9692.0200	259
9692.0400	259
9692.0450	259
9696.0020	259
9698.0030	259
9710.0009	261
9710.0010	261
9715.0100	38
9716.0010	270
9717.0500	227
9720.0090	261
9720.0100	261
9720.0200	261
9720.0300	261
9720.0450	261
9720.0800	261

Art. no.	Page
9720.0900	261
9721.0500	261
9721.2000	261
9721.5000	261
9738.0500	259
9738.2000	259
9738.5000	259
9740.2000	261
9740.5000	261
9746.0020	224
9749.0500	253
9750.0020	261
9751.0020	260
9754.0500	278
9754.5000	278
9759.0009	227
9759.0090	227
9759.0099	227
9759.0190	227
9770.0500	229
9770.2000	229
9770.5000	229
9772.0020	229
9775.0500	260
9778.0020	259
9780.0020	254
9781.0020	255
9783.0500	228
9783.2000	228
9783.5000	228
9786.0020	254
9793.0100	230
9795.0010	270
9797.0020	254
9835.0500	227
9838.0100	239
9838.0200	239
9840.0020	239
9842.0200	234
9844.0020	266
9849.0100	266

Art. no.	Page
9849.0200	266
9850.0500	225
9858.0024	255
9863.0100	264
9863.0200	264
9863.0450	264
9867.0100	263
9867.0200	263
9869.0500	224
9869.2000	224
9869.5000	224
9875.0020	263
9887.0090	224
9887.0180	224
9920.0500	24
9950.0020	228
9953.0500	24
9956.0030	228
9972.0500	278
9972.2000	278
9972.5000	278
9980.0020	241
9982.0030	241
11000.0001	216
11001.0030	216
11005.0001	216
11010.0010	217
11010.0050	217
11010.0100	217
11040.0010	216
11040.0050	216
11040.0100	216
11070.0010	217
11070.0050	217
11070.0100	217
11100.001	215
11101.001	215
11102.001	215
11103.001	215
11111.001	215
11400.0030	216

Art. no.	Page
11700.0030	216
11921.0030	216
97620020	259
DG10185.5000	119
DG10190.2500	60
DG1250.9008	72
DG1250.9095	72

NOTES

NOTES

ABBREVIATIONS AND EXPLANATIONS

ABS	Acrylonitrile butadiene styrene
ADR	Classification according to ADR – European agreement on the international transport of hazardous goods by road
CAS no.	Chemical Abstract-Service index number
CPE	Chlorinated polyethylene
EC Index no.	EC index (67/548/EEC)
EVA	Ethylene-vinyl acetate
HDPE	High-density polyethylene
LDPE	Low-density polyethylene
M	Molecular weight
NR	Natural rubber
PBT	Polybutylene terephthalate
PC	Polycarbonate
PCR	Polymerase chain reaction
PE	Polyethylene
PK	Packaging unit
PMMA	Polymethyl methacrylate
PP	Polypropylene
PS	Polystyrene
PTFE	Polytetrafluoroethylene
PU	Polyurethane
qPCR	Real-time quantitative PCR
TPE	Thermoplastic elastomers
UN	UN number

IMPRINT

Published by **Th. Geyer GmbH & Co. KG**
Dornierstraße 4–6, 71272 Renningen, www.thgeyer.com

Photographs **Th. Geyer GmbH & Co. KG**
Stefan Schäfer, Sabine Dörr & Hanno Heilbronner
Photoatelier Gös (Heidelberg), Thinkstock.com, Gettyimages.de

Printing **SV Druck + Medien GmbH & Co. KG**
Wasserwiesen 42, 72336 Balingen, www.sv-druckmedien.de

Layout **Th. Geyer GmbH & Co. KG**
Stefan Schäfer, Sabine Dörr & Hanno Heilbronner



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