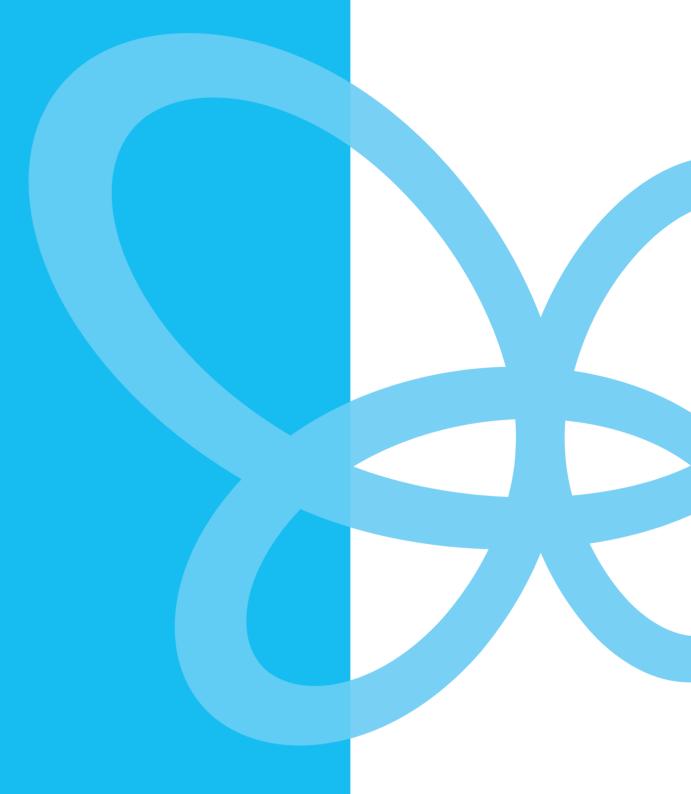
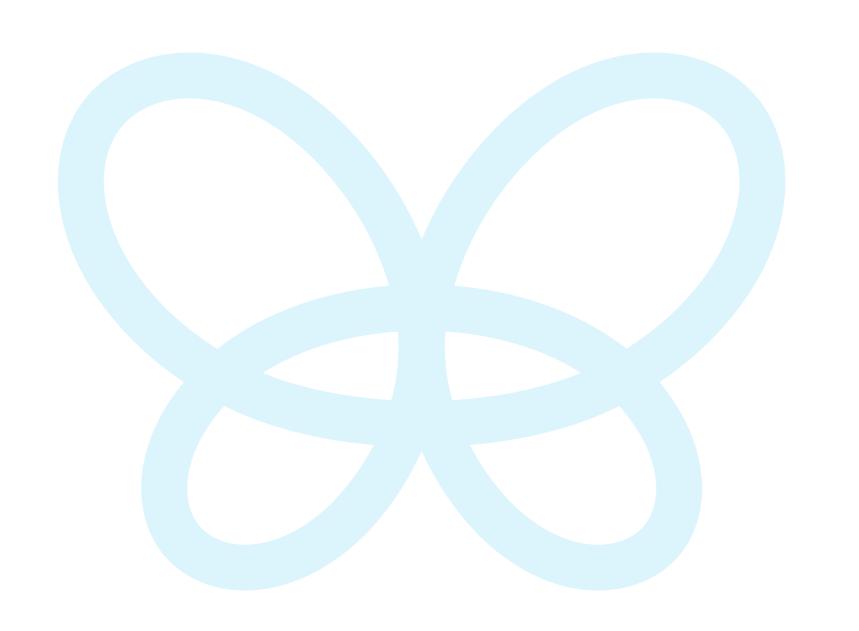


# Chemistry







to ensure safety in laboratories and enclosed public spaces





#### Who are we?

Since 1968, Erlab has been the world-leading specialist and inventor of standalone, ductless and zero-emission filtering fume hoods, enabling chemicals to be handled safely in laboratories.

Since day one, we have been entirely focused on researching, designing, developing and manufacturing long-lasting protection solutions. Our primary objective is to provide our users with the most effective solutions to protect them against chemical inhalation hazards in laboratories. Our worldwide presence, production facilities and strong research and development activity enable us to offer the most advanced filtration technology to laboratories in the chemical, pharmaceutical, cosmetics and food industries, as well as to hospitals and educational institutions.



Francois P. Hauville: 1932 - 2011: Founder of Erlab



Right: Antoine Hauville: Managing Director Centre: Marie Hauville: Co-founder of Erlab

#### AFNOR\* NF X 15-211:2009 standard

Compliance with standards is of utmost importance to us. Based on scientific criteria, the AFNOR NF X 15-211:2009 reflects the level of performance of our products, and ensures you are protected every day at your workstation.

Our expertise in recirculating filtered air places the environment at the heart of your laboratory: all our solutions have been designed to limit environmental impact and contribute towards one of today's major global challenges: saving energy.

\*French Standardization Association [Association Française de Normalisation]

#### International deployment from day one.

Filtering toxic gases and hazardous particles is a global issue. We have installed over 150 000 ductless filtering fume hoods in laboratories around the world.





Europe: Erlab S.A.S. (France)

North America: Erlab, Inc. (USA)

Asia: Erlab Ltd (China)







# **ERLAB ABOVE Filtration Technology**

The result of over 50 years of research and innovation, **ERLAB ABOVE FILTRATION TECHNOLOGY** is a mark of quality and a safety guarantee in the field of filtration technology which is **used to protect laboratory personnel.** 

We use our technological developments and expertise to drive solutions, transforming the impossible into the possible.

**ERLAB ABOVE** is the invisible difference. It brings together technology that filters, detects and communicates, making the laboratory air you breathe cleaner and safer, both inside and out.

Accept nothing less than **ERLAB ABOVE** filtration technology. A proven mark of quality since 1972.



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## THE BENEFITS OF ERLAB PRODUCTS

Erlab solutions are designed to ensure people's safety when handling chemicals in the laboratory. Based on the principle of filtration, they offer increased protection against the risk of chemical inhalation caused by the emission of harmful molecules and particles at the workstation.

## Safety

Erlab solutions are designed to ensure people's safety when handling chemicals in the laboratory. Based on the principle of filtration, they offer Erlab increased protection against the risk of chemical inhalation caused by the emission of harmful molecules and particles at the workstation.

## **Protect the environment**

Erlab solutions do not require a connected ventilation system, which stops pollutants from being released straight into the atmosphere and therefore helps protect the environment. Furthermore, they do not create pollution like traditional extraction hoods which need to produce energy to keep the ventilation systems functioning correctly.

### **Reduce installation costs**

Erlab solutions are quick and easy to install. Unlike connected systems, they do not require a ventilation system linked to an air supply and extraction system to be installed.

You just need one plug to get up and running, and you can get set up at any suitable moment, without complex planning.



## Deliver energy savings

Creating ventilation balance is essential for connected systems to function correctly; however, this requires significant energy consumption. Erlab solutions, on the other hand, incur no energy costs for the extraction and supply of conditioned air, nor do they have high operational costs, even taking into account the cost to change the filter.

## Optimise the flexibility and design of laboratories

Erlab solutions can be easily moved within a laboratory to suit your protection needs, and without affecting the ventilation balance of the room.

## Proven technology

With over 150,000 protection enclosures installed around the world, Erlab offers a proven product ecosystem.



Research and

Ten-year quarantee





Flexible and ductless filtration solutions

# THE QUALITY OF ERLAB PRODUCT DESIGN

Our products are the result of 50 years of research and development. Your safety is our primary concern.



## Research and development

Our goal is to be, and to continue to be, the world's leading partner in personal safety. At Erlab, we are therefore continually investing in our state-of-the-art laboratories and research teams. All of our Erlab engineers and chemists are experts in molecular filtration. In the Erlab laboratory, they use sophisticated analytical equipment to conduct the hundreds of tests required to meet the standards, as well as to determine and optimise the retention capacity of the filters. We continuously monitor the safety of our Erlab products, constantly improve the quality and technologies we used, as well as develop new products that offer enhanced protection for laboratory personnel.

Equipment for filtration and containment tests worth more than 1 million.

Design

At Erlab, we place great emphasis on the design of our products. For this reason, the dimensions, visibility, front openings, mounting and working position are designed to best meet the needs of those who handle samples.

#### Enclosures

- Enclosure width: from 80 cm to 180 cm
- Enclosure depth: from 621 cm to 960 cm
- Easy to install large instruments
- Easy integration with laboratory furniture

#### Visibility

- High optical quality synthetic glass panels for an exceptional view of handlings
- Lighting suitable for precise work conditions
- Tilted front panel for excellent visibility

#### Front panel openings

- Large range of movement in the enclosure
- Central protection screen avoids any risk of chemical projection

#### Installation

- Ready to install, quick to assemble
- Very few tools required

#### **Working position**

- Fatigue-free handling while sitting or standing
- Work surface with rounded edges to provide rest for forearms
- Tilted front panel provides visual comfort and a comfortable working position

#### Home machine interface

- Simple, intuitive and connectable
- Monitor safety in real time

## Production

**Production has always been at the heart of Erlab's operations.** This is an essential area, highlighted by the work of the design team, who produce and optimise our solutions using the most advanced production technologies, in order to meet market expectations.

#### **Guarantees and commitments**

Erlab only provides protective enclosures to customers once they have verified that the enclosure is suitable for

the chemicals they wish to use. The customer's specific handlings are first analysed in Erlab's internal testing laboratory to determine if they can be carried out safely with a filtering fume hood from the Erlab range, before Erlab equips their laboratory.







Flexible and ductless filtration solutions

# THE ESP®

A package of three services is included with your purchase, designed to ensure your safety throughout the service life of your device.

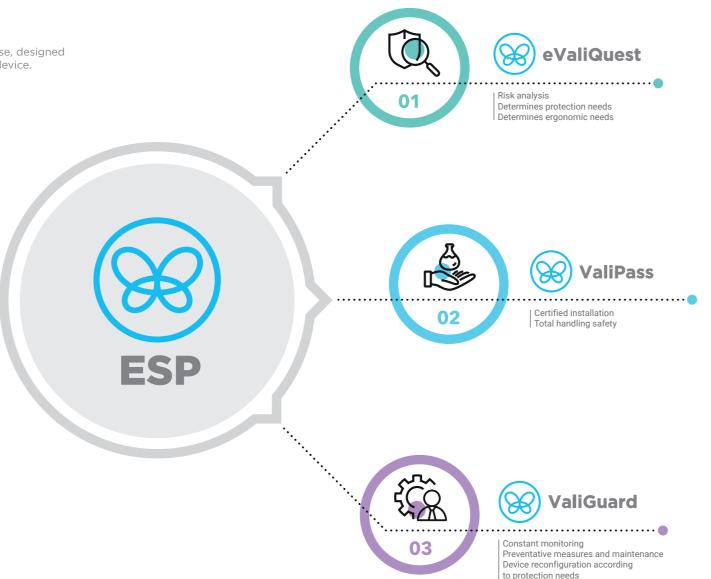
# WHAT IS THE **ERLAB SAFETY** PROGRAM?

## **Erlab's long-term commitment** to ensuring your safety.

Erlab's R&D laboratory analyses the interactions between molecules and particles in order to approve the filtration technology for your handlings. Based on this scientific analysis, our laboratory will recommend the type of device, filtration column configuration and enclosure size that will ensure your protection.

Contact your **ESP** specialist today to set up your Erlab protection solution.

Website: www.erlab.com







An ESP agent will help you fill out the initial questionnaire where you will specify the handlings that you wish to carry out. Within 48 hours, our laboratory specialists will suggest which type of device and filtration technology will be suitable for your use. We are committed to ensuring your protection by certifying the feasibility of your handlings.





When your fume hood is installed, a usage certificate will indicate the specific chemicals used, the type of filter and the estimated service life for which your device has been validated. This certificate acts as a permanent reminder for the user or the person responsible for data safety for the use of the device.





**(⊗)** ValiGuard ℝ

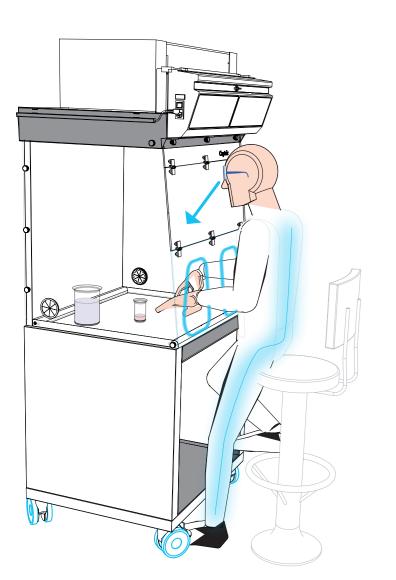
An ESP® agent will contact you periodically to ensure that your handlings have not changed and that the filter is still effective. They will guide you through each step for checking the performance of the filter as well as for replacing it. If a change to handlings is noted, the ESP® agent will ask you to complete a new questionnaire (see step 1). After the assessment, a new usage certificate specifying the authorised chemical products will be sent to you, in order to carry out handlings in optimal safety conditions.

Evolution of handlings









## **STANDARDS**

#### The AFNOR NF X 15-211 standard

This is currently the most advanced and rigorous industry standard which assesses the safety of filtering fume hoods. The French Union of Mechanical Standardisation, comprising a panel of experts (from the French National Research and Safety Institute, state bodies and professional unions), was appointed by **AFNOR** to establish the AFNOR NF X 15-211:2009 standard. This standard applies to filtering fume hoods (also known as recirculating fume cupboards or **E**nclosures for **T**oxics using **R**ecirculating **A**ir **F**iltration) which are designed for research work, analysis, teaching, etc. in any laboratory in which chemical agents subject to Threshold Limit Values (TLV) or Occupational Exposure Limits (OEL) are handled.

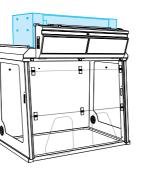
#### This standard sets out performance requirements related to:

- Filtration efficiency
- Containment efficiency
- Air face velocity
- Documentation: CHEMICAL LISTING\*
- \* Guide to filtered or retained chemicals

#### The classes set out by the standard are:

**Class 1:** Filtering fume hood with safety reserve, one main filtration level, one safety filtration level and continuous monitoring of filtration efficiency.

Class 2: Filtering fume hood without safety reserve and with one main filtration level.



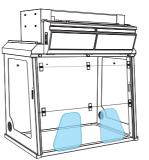
#### Filtration efficiency

This is defined as the filter's ability to trap harmful molecules handled in the enclosure and determines the quality of the recirculated air downstream of the filter.



## **Containment efficiency**

This is defined as the capacity of the fume hood to keep vapours or particles within the enclosure, preventing their release into the laboratory environment.



#### Air face velocity

This refers to the ability of the fume hood to create a dynamic air barrier between the operator and the handling.



#### **Documentation: Chemical Listing\***

Erlab has created a **CHEMICAL LISTING** a guide to over 700 chemicals. This guide is provided with every enclosure, in compliance with the standard.

\* Guide to filtered or retained chemicals





## Filtration efficiency

Erlab's filtration technology conforms with the **NF X 15-211:2009 standard**, the most rigorous industry standard for molecular filtration, developed by a committee of independent scientists and specialised manufacturers.

This standard establishes the performance criteria which impose a maximum release of 1% of the TLV (Threshold Limit Value) of the handled products.



#### Solvents test

Performance criterion met: <1% of the TLV



#### **Acids test**

Performance criterion met: <1% of the TLV





	Class 1	Class 2		
Normal operating phase	Normal operating phase, during which the concentration downstream of the filters is less than 1% of the TLV			
Detection phase	he less than 1% of the 11V and during which the automatic filter failure detector			
Safety phase	Safety phase, during which the concentration downstream of the filters must be less than 50% of the TLV and whose duration must not be less than 1/12 of the duration of the normal operating phase			

### Containment efficiency of the enclosure

The level of containment is defined by the capacity of the fume cupboard to keep pollutants within the enclosure, preventing their release into the laboratory environment.

Containment efficiency is proven by tests carried out according to the protocols outlined in the EN 14175-3, ASHRAE 110:2016 and AFNOR NF X 15-211:2009 standards.













## **FILTRATION**

Expertise and technologies developed by a leading R&D team.

We provide filtration technology that offers a high level of protection for laboratory personnel from inhaling chemical substances.



Our unique solutions allow pollution to be captured at source and in the filters before it is are released into the clean air of the work environment. These filter cartridges are available as part of a unique activated carbon range, which is designed to protect personnel from inhalation.

This is possible thanks to the filtration technology that our Research and Development department has been continuously improving for over 50 years.

A very strict product specification based on compliance with standardised international protocols allows us to select raw materials and develop technologies with tailored porosity which have the capacity, under normal usage conditions, to adsorb a very broad spectrum of molecules without risk of desorption, just like in military-style gas masks. Our filters are subject to rigorous tests in compliance with the **AFNOR NF X 15-211:2009 standard**, the reference in the field of filtering fume hoods.

What is adsorption? Adsorption is a group of physico-chemical surface reactions through which free molecules are condensed on the surface of a solid. They can take place in a liquid or gaseous medium. The phenomenon of adsorption has long been of interest for the capture of gaseous pollutants, particularly in gas masks or filtering fume cupboards. Be careful, however, not to confuse adsorption with absorption.

## FILTRATION TECHNOLOGY

Carbon filter anti-detachment system US patent number 7,563,301.

### Air pollutants in your laboratory

Chemical agents, in the form of gases and/or particles, are an inhalation health risk to those who work in laboratories. The health authorities have established concentration thresholds that must not be exceeded under any circumstances and that are defined by occupational exposure limit values (TLV), expressed in parts per million (PPM). The harmful omnipresence of these pollutants due to everyday handling requires all laboratories to adopt prevention and protection measures which comply with the regulations in force.

With over 50 years of expertise in filtration technology, **Erlab** has developed Flex technology, which combines molecular and particulate filtration technologies to provide a global protection solution for the most common handlings encountered in all laboratory disciplines, regardless of their environment and sector of activity.

#### Molecular filtration technology: super-activated carbon

For over a century, activated carbon has been used for its exceptional adsorption properties. The different varieties are used today in multiple applications, including water treatment, VOC, solvent recovery and chemical catalysis.

Each of these uses requires an activated carbon with unique and adapted physical and chemical properties.

Our experience is based on more than 50 years of testing and is expressed in our Chemical Listing guide, which attests to our excellent mastery of filtration.

We also integrate an environmental dimension when we develop our filtration technology; in particular, refusing to use environmentally toxic substances, which we have avoided for many years.

Our filters are subject to rigorous tests in compliance with the **AFNOR NF X 15-211:2009**. Their performance levels, measured by the results obtained, are a guarantee of safety for those who use our solutions.

In terms of safety, each of our filters is delivered with a quality certificate that tracks its entire manufacturing cycle.

#### Which molecular filter for which handling?

Different filter types					
AS	For organic vapours				
BE+	Multipurpose for acid vapours + organic vapours				
F	<b>F</b> For formaldehyde vapours				
К	For ammonia vapours				

#### Particulate filtration technology: HEPA 14

This filtration technology traps particles larger than 0.1  $\mu$  m in diameter with an efficiency of 99.995% according to the MPPS (Most Penetrating Particle Size) method of the EN 1822-1 standard.

**Erlab**®





# **ERLAB FILTERS**

Erlab filters contain the world's most powerful carbon.

## Only Erlab manufactures high efficiency filters,

the result of 50 years of research and development.





# Activated carbon filtration zone. Anti-pollutant case with carbon bed height control.

# Prefiltration zone.

# **REVOLVING® FILTER SYSTEM**

Optimising the main filters' service life

#### The advantages of the Revolving system

Significant optimisation of the main filter's service life Substantial savings on replacement costs.



erlab

You can breathe.

New carbon safety



# The patented concept **Revolving filter system**

"Class 1" filtration column has two filtration levels:

#### One main module + one safety module.

The Revolving system allows you to replace one filter module at a time and optimises the main filter's service life. No pollutants are released into the laboratory, even if there is a fault with the main filter.

When the main filter approaches saturation, the few non-retained molecules are directed straight towards the safety filter. The safety filter replaces the main filter when the latter reaches maximum capacity. A new filter is then installed in place of the safety filter.







## **DETECTION**

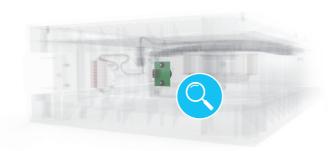
Sensors

Erlab's exclusive detection system consists of three sensors which detect very broad spectrum of molecules. This allows users to monitor filtration efficiency and performance.

The three sensors: VOC (Molecode S), Formaldehyde (Molecode F) and Acids (Molecode A) are integrated following the automatic online chemical hazard analysis via our eValiQuest service.

The detection system also has other sensors which check your enclose is functioning correctly, in real time.

You can find this information on the device's embedded service (p.26-27) and on the eGuard® management interface (p.94).



#### Sensors

For optimal enclosure containment and handling safety according to your device.



Filtration performance monitoring for Formaldehyde

Included in accordance with the eValiQuest assessment.

(Automatic online analysis of chemical hazards)



Filtration performance monitoring for Acids

Included in accordance with the eValiQuest assessment. (Automatic online analysis of chemical hazards)



Filtration performance monitoring for COV

> Included in accordance with the eValiQuest assessment. (Automatic online analysis of chemical hazards)

VOC

(Molecode S)



Air face velocity monitoring



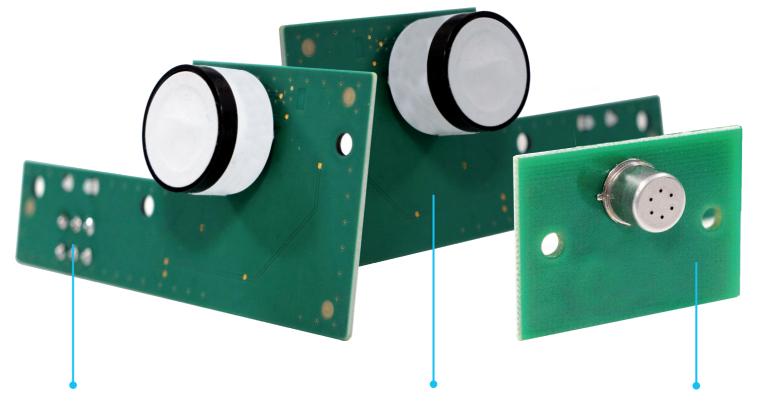
**Tachometer** 

Monitoring of fans





# Three sensors, specifically adapted to detect of a very broad spectrum of molecules:



Formaldehyde sensor (Molecode F) Electrochemical sensor detects formaldehyde vapours.

Acid sensor (Molecode A) Electrochemical sensor detects inorganic acid vapours.

**VOC sensor** (Molecode S) Semiconductor sensor detects volatile organic compounds.







# **FLEX® TECHNOLOGY**

US patent number 7,766,732 B.



The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs.

This has been made possible by the design of single-dimension filter cartridges which, through vertical stacking, represent a major innovation in Flex technology.

The modular filtration column adapts to the protection needs and laboratory environment. The different Captair filtering fume hood models in the range can also be equipped with one to four filtration columns with unrivalled retention capacities.

This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings. One single device can be reconfigured over time and easily reassigned to other applications.





#### LIQUIDS For dilutions, dosages, extractions, transfers, etc.







**LIQUIDS & POWDERS** 

For solutions, filtration, extractions, etc.



**IN CLEAN ROOMS** 

For clean rooms up to ISO class 7





CONFIGURATIONS

ATION

FILTR,







































Class 1= Maximum safety guaranteed by the AFNOR NF X 15-211:2009 standard.



Carbon filter Carbon Filter Module

Super-activated carbon. Exceptional adsorption properties.



### **HEPA filter**

the EN 1822-1 standard.

HEPA Particulate Filter Module High-efficiency filtration of particles in the air which guarantees an overall filtration efficiency of 99.995% (particles greater than 0.1 micron), according to the MPPS method in



Ventilation regulation. Low energy consumption. Reduced noise level.











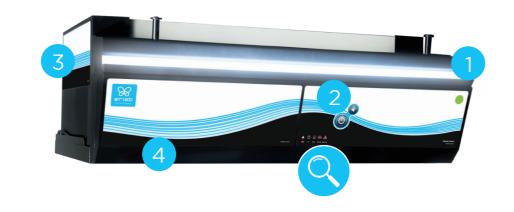
## **SMART TECHNOLOGY**

Smart technology is a simple, innovative and intuitive method of communication for added safety.

Without the need for a screen, this communication interface allows operators, through its **simple and intuitive** operation, to focus all their attention on what is important: **handling.** 

Using light and sound signals, this technology indicates the level of user protection.

Different **light and sound pulses** also inform the user of the device's operational status in real time.



#### THE BENEFITS OF SMART TECHNOLOGY:



#### SIMPLICITY

**One-touch activation** for simple and intuitive operation.



#### **SAFETY**

Through the different light and sound pulses, Smart technology keeps you informed of your protection status in real time.



#### DETECTION

The exclusive detection system constantly **monitors the filtration fault status.** 



#### CONNECTIVITY

By connecting your device to the **eGuard** network, you can monitor the operating parameters of your Smart equipment both in real time and remotely.

# 1 Light pulses

Real-time communication with **flashing LED lights** provides the user with an intuitive update on the device's operational status.

2 Simplicity

One single activation key.

3 Detection system

The exclusive detection system constantly monitors filtration performance.

4 Embedded software

This service provides direct access to the following information: the status, settings and historical data for your device.



# Smart technology alarms?



**Erlab**®

Smart technology communicates the device's functional status in real time:



Timer (One beep sound)



Hood air face velocity
(Two beep sounds)



Prolonged opening of cabinet doors (Two beep sounds)



Filtration fault indicator (Three beep sounds)



**Ventilation fault** (Four beep sounds)

# **ERLAB PRODUCTS AND THEIR APPLICATIONS**







Flexible and connection-free filtration solutions



**Erlab**®





# CHEMICAL HANDLINGS AND PROTECTION OF THE HANDLER

# Captair® FILTERING CHEMICAL FUME HOODS

**Captair filtering fume hoods** provide unrivalled filtration quality to protect operators, and are superior to any other filtration or extraction device on the market.

By capturing toxic gases at source and filtering them through the world's most powerful filters developed by Erlab (which are 10 to 1,000 times more effective than other filters on the market), it is possible to obtain **air that is over 99.995% pure,** both inside and outside.

A system of endless benefits, providing flawless protection, not only for laboratory personnel, but also for all the company's employees, as well as everyone living nearby.

They have a powerful light communication interface, with **Smart technology** that keeps operators informed at all times about the proper functioning and level of safety of their fume hoods.

The technology offers an exceptional working comfort that removes any anxiety, allowing greater concentration on research for those who work in the fields of chemistry, pharmaceuticals, cosmetics, biochemistry, education, petrochemistry, forensics, construction, agri-food, hospitals, etc.

## Flex® technology

A flexible and adaptable modular filtration column

The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs. This has been made possible by the design of single dimension filter cartridges which, through vertical stacking, represent a major innovation in the range. This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings.

## Sampling sound

For filter fault level detection.

(Not present on devices equipped with the Molecode S option, which automatically detects filter faults)  $\,$ 

#### Electronic anemometer

This system ensures permanent control of the air face velocity, which must be between 0.4 and 0.6 m/s (in accordance with the requirements of the AFNOR NF X 15-211:2009 standard).

## Easy installation

Erlab solutions are quick and easy to install. Unlike connected systems, they do not require a ventilation system linked to an air supply and extraction system to be installed. You just need one plug to get up and running, and you can get set up at any suitable moment, without complex planning.

## Cable grommet

Cable grommet port.

## Easy to relocate

Erlab solutions can be moved within a laboratory to suit your protection needs, without affecting the ventilation balance of the room.



## Smart technology

Light and sound pulses inform the user about their level of protection. The user will therefore be informed, in real time, of the hood's operating time, the air face velocity status, level of filtration faults and settings related to ventilation, through the various light and sound pulses.

#### Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

#### eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Low-energy lighting

LED lighting. One to three tubes, depending on the model. Dust and vapour proof. Bright and uniform lighting on the work surface.

#### New reverso panel

One panel for all working positions. With a simple movement, you can switch from a low to a medium position, in complete safety.

### Interchangeable work surfaces

#### Glass work surface

Enamelled glass work surface with joined frame and retention tray. Ergonomic arm rest for a comfortable working position.

#### Phenolic resin work surface

Phenolic resin work surface with integrated retention tray and ergonomic arm rest for a comfortable working position. High chemical and mechanical resistance. Ideal for precise weighing operations.

#### Inox 304L work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.







Liquids & Powders

Clean room

Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate 220 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 65 W

Type of opening Oblong

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Transparent and colourless PMMA with high optical purity

> Filtration module Injected polypropylene







Liquids & Powders



Clean room





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> Filtration module Injected polypropylene



Tests and labelling (€

Internal L 969 x D 621 x H 732\* **External** L 969 x D 621 x H 1110/1285\*\*

\*\*Max/min height of the filtration column

<sup>\*</sup>Usable height of the work surface







Liquids & Powders

Clean room

Flexible and ductless filtration solutions



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> Filtration module Injected polypropylene



\*Usable height of the work surface

\*\*Max/min height of the filtration column







Type of opening Reverso or sequential see p.47

Structure Electro-galvanized and corrosion resistant steel, coated with thermosetting

Side and front panels Transparent and colourless PMMA with high optical purity

anti-acid polymer

Filtration module Injected polypropylene



Tested according to ASHRAE 110:1995

and conforms with BS7989

Tests and labelling (€

Dimensions (mm): Internal L 969 x D 749 x H 907\* External L 1005 x D 749 x H 1340/1515\*\*

\*Usable height of the work surface







Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

**Air flow** rate 660 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency

Power consumption 160 W

**Type of opening**Reverso or sequential *see p.47* 

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

## Side and front panels

Transparent and colourless PMMA with high optical purity

Filtration module Injected polypropylene









**Air flow rate** 660 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 160 W

**Type of opening**Reverso or sequential see p.47

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Transparent and colourless PMMA with high optical purity

Filtration module
Injected polypropylene









Liquids & Powders



Clean room



<sup>\*</sup>Usable height of the work surface
\*\*Max/min height of the filtration column

<sup>\*\*</sup>Max/min height of the filtration column



Powders

Liquids & Powders

Clean room





Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate 880 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 220 W

# Type of opening

Reverso or sequential see p.47

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Transparent and colourless PMMA with high optical purity

> Filtration module Injected polypropylene





## Work surfaces



#### Glass work surface

Enamelled glass work surface with joined frame and retention tray. Ergonomic arm rest for a comfortable working position.

\*Spacing bar only for devices without a work surface

#### Transparent back panel



Made of synthetic glass. Offers a 360° view of handlings being carried out in the enclosure and optimises lighting.

## Phenolic resin work surface

Phenolic resin work surface with integrated retention tray and an ergonomic arm rest for a comfortable working position. High chemical and mechanical resistance. Ideal for precise weighing operations.



#### Inox 304L work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.

Only available for models: 321, 391, 483, 714

## Work bench



# Mobicap

Metal work equipped with four wheels, two of which are selflocking. Allows the device to be moved with complete safety.

Only available for models 321-391-



#### Benchcap

Fixed metal work bench. Equipped with four adjustable feet allowing the unit height to be adjusted.



## Benchcap optional equipment

Benchcap furniture with phenolic resin work surfaces offer multiple equipment solutions for fluids (such as a swan neck, etc.), as well as for technical gases and energy (such as nozzles on backsplash,

Get in touch to discuss tailoring your hood to your needs.



### Benchcap shelf option

Internal, semi-removeable, metal Benchcap shelf.

\*\*Max/min height of the filtration column

**Erlab**®





# CHEMICAL HANDLINGS AND PROTECTION OF THE HANDLER

# SECURE Captair® WEIGHING STATIONS

**Secure Captair weighing stations** guarantee users an excellent level of safety.

They offer the stability and accuracy required for applications up to 10-6g during laboratory weighing.

This is the ideal solution for high-risk operations that require a confined environment to eliminate any potential exposure of personnel to toxic products.

**The Smart technology** embedded in Erlab weighing stations keeps users safe: a powerful light-based communication interface keeps users informed in an intuitive way about the operating status of their weighing stations.

## Flex® technology

Modular filtration technology tailored to the weighing of liquids and/or powders

The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs. This has been made possible by the design of single dimension filter cartridges which, through vertical stacking, represent a major innovation in the range. This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings.

#### Electronic anemometer

This system ensures permanent control of the air face velocity, which must be between 0.4 and 0.6 m/s (in accordance with the requirements of the AFNOR NF X 15-211:2009 standard).

## Easy to relocate

Erlab solutions can be moved easily within a laboratory to suit your protection needs, without affecting the ventilation balance of the room.

## Easy installation

Erlab solutions are quick and easy to install. Unlike connected systems, they do not require a ventilation system linked to an air supply and extraction system to be installed. You just need one plug to get up and running, and you can get set up at any suitable moment, without complex planning.

## Cable grommet

Cable grommet port.



## Smart technology

Light and sound pulses inform the user about their level of protection. The user will therefore be informed, in real time, of the hood's operating time, the air face velocity status, level of filtration faults and settings related to ventilation, through the various light and sound pulses.

#### Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

#### eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Low-energy lighting

LED lighting. One to three tubes, depending on the model. Dust and vapour proof. Bright and uniform lighting on the work surface.

#### Waste port

It comes with a double waste bag and protective case.

### Interchangeable work surfaces

#### Phenolic resin work surface

Phenolic resin work surface with integrated retention tray and ergonomic arm rest for a comfortable working position. High chemical and mechanical resistance. Ideal for precise weighing operations.







Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate 220 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 65 W

Type of opening Oblong

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Transparent and colourless PMMA with high optical purity

> Filtration module Injected polypropylene



Tests and labelling ( E

External L 808\*\*\* x D 621 x H 1110/1285\*\*

\*\*\* Please note that the width does not include the waste port; see page 46

\*Usable height of the work surface

\*\*Max/min height of the filtration column



Liquids & Powders





Number of filtration columns

Number of fans

Air flow rate 220 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 65 W

Type of opening Oblong

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Transparent and colourless PMMA with high optical purity

> Filtration module Injected polypropylene



Liquids & Powders

Tested according to ASHRAE 110:1995 and conforms with BS7989 Tests and labelling (€

Internal L 969 x D 621 x H 732\*

External L 969\*\*\* x D 621 x H 1110/1285\*\*

\*Usable height of the work surface

<sup>\*\*</sup>Max/min height of the filtration column

<sup>\*\*\*</sup> Please note that the width does not include the waste port; see page 46







Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate 220 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 65 W

Type of opening Oblong

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

## Side and front panels

Transparent and colourless PMMA with high optical purity

> Filtration module Injected polypropylene



Tested according to ASHRAE 110:1995 and conforms with BS7989

Tests and labelling ( E

Dimensions (mm):

Internal L 1244 x D 620 x H 732\* **External** L 1288\*\*\* x D 620 x H 1110/1285\*\*

\*Usable height of the work surface

\*\*Max/min height of the filtration column

\*\*\* Please note that the width does not include the waste port; see page 46

Liquids & Powders





Number of filtration columns

Number of fans

Air flow rate 440 m<sup>3</sup>/h

Air face velocity 0.4 to 0.6 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 105 W

Type of opening Reverso or sequential see p.47

Structure Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

Side and front panels Transparent and colourless PMMA with high optical purity

Filtration module Injected polypropylene



Tested according to ASHRAE 110:1995

and conforms with BS7989

Tests and labelling ( €

Liquids & Powders

Dimensions (mm):

Internal L 969 x D 749 x H 907\* **External** L 1005\*\*\* x D 960 x H 1340/1515\*\*

\*Usable height of the work surface

\*\*Max/min height of the filtration column

\*\*\* Please note that the width does not include the waste port; see page 46







## **EQUIPMENT**

For secure Erlab weighing stations.

#### Work surfaces



#### Phenolic resin work surface

Non-conductive material, very high mechanical and chemical resistance. Integrated retention tray. Ensures accurate weighing results and consistent operations. Prevents static charging of items introduced into the enclosure. Easy to clean.

#### Waste ports



#### L 274 x D 278 x H 279 mm

Internal and external access secured by protective air flow.

Double bag attachment system that prevents any waste from being spilled outside the enclosure.

External protection against tearing or damage to the bags.

## Work bench



#### encncap

Work bench that transforms the weighing unit into an independent work station.

Equipped with four antivibration jacks.

These allow the station height to be changed.



## Benchcap optional equipment

Benchcap furniture with phenolic resin work surfaces offer multiple equipment solutions for fluids (such as

a swan neck, etc.), as well as for technical gases and energy (such as nozzles on backsplash, etc.).

Get in touch to discuss tailoring your hood to your needs.



#### Benchcap shelf option

Internal, semi-removeable, metal Benchcap shelf.

## TYPE OF OPENING

For Erlab chemical handlings.

#### Smart 321-391-481 hoods

#### Oblong opening



# Smart 392-483-633-714 hoods

## Sequential opening



#### Reverso\* opening



for working while sitting or standing. The door can be opened completely to allow the passage of materials.

Our openings are ergonomically designed and secure to ensure that air velocity always conforms with the standard.

**Erlab**®





# HANDLINGS AND SAMPLES PROTECTION

# Captair® Bio PCR WORKSTATIONS

**PCR workstations** have a high-efficiency particulate filtration system (HEPA H14/ULPA U16) that provides a particle-free work station, eliminating all pollution around the handling. The UV lamp is also used to decontaminate the work surface and avoids biological cross-contamination between two operations.

As an option, a molecular filter can also be used to protect handlings from VOC in the laboratory air. Erlab's biological hoods are completely standalone and do not require any ventilation system connection costs nor special installation costs. With integrated **Smart technology**, the intuitive light based communication system keeps users informed about the operating status of their equipment.

## Flex® technology

The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs. This has been made possible by the design of single dimension filter cartridges which, through vertical stacking, represent an innovation in the range. This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings.

#### **UV** light

UV decontamination. (Germicidal lamp - 254 nm)

## Easy to relocate

Erlab solutions can be moved easily within a laboratory to suit your protection needs, without affecting the ventilation balance of the room.

## Cable grommet

Cable grommet port.

## Smart technology

Light and sound pulses inform the user about their level of protection. The user will therefore be informed, in real time, of the hood's operating time, the air face velocity status, level of filtration faults and settings related to ventilation, through the various light and sound pulses.

## Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

#### eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Low-energy lighting

LED lighting.

Bright and uniform lighting on the work surface.

## Front panels

UV-resistant front and side panels.

#### Work surface

#### Inox work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.









Flexible and ductless filtration solutions



Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 25 W

Type of opening Sequential

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Acrylic (10 mm thick) designed to protect users from harmful UV rays and β (Beta) radiation emitted by radioactive isotopes such as: T(3H), 14C, 32P

Filtration module Injected polypropylene



Tests and labelling ( €

Dimensions (mm): **Internal** L 765 x D 630 x H 440

**External** L 825 x D 630 x H 622

UV decontamination





Number of filtration columns

#### Number of fans

Air flow rate\* 200 / 118 m<sup>3</sup>/h of 245 / 144 m<sup>3</sup>/h

> Air face velocity\* 0.35 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption\* 40-45 W

> Type of opening Sequential

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

Side and front panels Acrylic (10 mm thick) designed to protect users from harmful UV rays and β (Beta) radiation emitted by radioactive isotopes such as: T(3H), 14C, 32P

> Filtration module Injected polypropylene



UV decontamination



Ultra clean air

\*Min/max height depending on the filtration column

50 \*According to the configuration of the filtration column



Ultra clean air

UV decontamination







## Number of fans

#### Air flow rate\*

200 / 118 m<sup>3</sup>/h or 245 / 144 m<sup>3</sup>/h

#### Air face velocity\* 0.35 m/s

Voltage/frequency 110-230 V / 50-60 Hz

## Power consumption\*

40-55 W

#### Type of opening Sequential

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

#### Side and front panels

Acrylic (10 mm thick) designed to protect users from harmful UV rays and β (Beta) radiation emitted by radioactive isotopes such as: T(3H), 14C, 32P

## Filtration module

Injected polypropylene



Tests and labelling ( E

Internal L 969 x D 625 x H 523 **External** L 1013 x D 670 x H 965/1059\*

\*Min/max height depending on the filtration column

## **EQUIPMENT**

For Erlab PCR workstations.

#### Work surfaces

#### Inox 304L work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.

Only available for models: 321, 391, 483, 714

#### UV lamp



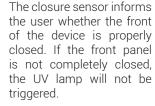
#### **Antibacterial UV lamps:** Wave length: 254 nm

Uniform distribution of radiation on the work surface. Reflectors that eliminate shadows. Exposure adjustable from 1 to 30 minutes. Automatic UV shut-down if door is opened.

## Closure sensor



#### Sensor



#### Work bench



#### Mobicap

work equipped with four wheels, two of which are selflocking. Allows the device to be moved with complete safety.

Only available for models 320-321-391



#### Benchcap

Fixed metal work bench. Equipped with adjustable feet allowing the unit height to be adjusted.

#### Benchcap optional equipment



Benchcap furniture with phenolic resin work surfaces offer multiple equipment solutions for fluids (such as a swan neck, etc.), as well as for technical gases and energy (such as nozzles on backsplash

Get in touch to discuss tailoring your hood to your needs.

## Type of opening



#### Sequential opening

The ergonomic and secure opening conforms with the standard.



#### Shelf option

Internal, semi-removeable, metal Benchcap shelf



**Erlab**®





# HANDLINGS AND SAMPLES PROTECTION

# Captair® Flow FILTERING CLEAN AIR WORKSTATIONS

**Mobile and ductless, the filtering clean air enclosure** is the ideal workstation for all handlings that require a perfectly clean environment, away from any pollution.

Erlab's high-performance filtering clean air enclosure is equipped with high-efficiency HEPA H14 (or ULPA U16) filters, which provide optimal protection against particulate contamination and also provide an ISO Class 5\* work environment, according to the EN ISO 14644-1: 2015 standard. Equipped with **Smart technology**, the Erlab filtering clean air enclosure allows users to focus more on their research. A powerful and intuitive light communication interface keeps them informed about their level of safety at all times. As an option, a molecular filter can also be used to protect handlings from VOC present in the laboratory atmosphere.

## Flex® technology

The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs. This has been made possible by the design of single dimension filter cartridges which, through vertical stacking, represent a major innovation in the range. This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings.

## Low-energy lighting

LED lighting. One to three tubes, depending on the model. Bright and uniform lighting on the work surface.

## Easy to relocate

Erlab solutions can be moved easily within a laboratory to suit your protection needs, without affecting the ventilation balance of the room.

## Cable grommet

Cable grommet port.



## Smart technology

Light and sound pulses inform the user about their level of protection. The user will therefore be informed, in real time, of the hood's operating time, the air face velocity status, level of filtration faults and settings related to ventilation, through the various light and sound pulses.

#### Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

#### eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Monitoring system

Continuous air flow monitoring

#### Work surface

#### Inox work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.







Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate\* 320 m<sup>3</sup>/h or 150 m<sup>3</sup>/h

Air face velocity\* 0.35-69 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 35-55 W

Type of opening\* Oblong or sequential

#### Structure

Electro-galvanised and corrosion resistant steel, coated with anti-acid polymer

> Side and front panels Chemical-resistant acrylic

Filtration module Injected polypropylene

56



\*\*Min/max height depending on the filtration column

Ultra clean air



Number of filtration columns

Number of fans

Air flow rate\* 345 m<sup>3</sup>/h or 150 m<sup>3</sup>/h

Air face velocity\* 0.35-69 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 40-55 W

Type of opening\* Oblong or sequential

Structure Electro-galvanised and corrosion resistant steel, coated with anti-acid polymer

> Side and front panels Chemical-resistant acrylic

Filtration module Injected polypropylene



Ultra clean air

\*According to the configuration of the filtration column

\*\*Min/max height depending on the filtration column

\*According to the configuration of the filtration column







Flexible and ductless filtration solutions



Number of filtration columns

Number of fans

Air flow rate\*

770 m<sup>3</sup>/h or 530 m<sup>3</sup>/h

Air face velocity\* 0.35-69 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 90-95 W

Type of opening Sequential

#### Structure

Electro-galvanised and corrosion resistant steel, coated with anti-acid polymer

> Side and front panels Chemical-resistant acrylic

Filtration module Injected polypropylene



Ultra clean air



Number of filtration columns

Number of fans

Air flow rate\* 1040 m<sup>3</sup>/h or 690 m<sup>3</sup>/h

Air face velocity\* 0.35-69 m/s

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 110 W

Type of opening Sequential

Structure Electro-galvanised and corrosion resistant steel, coated with anti-acid polymer

> Side and front panels Chemical-resistant acrylic

Filtration module Injected polypropylene



Ultra clean air

\*\*Min/max height depending on the filtration column

\*According to the configuration of the filtration column

\*\*Min/max height depending on the filtration column







Flexible and ductless filtration solutions

## **EQUIPMENT**

For Erlabfiltering clean air workstations.

#### Work surfaces



#### Phenolic resin work surface

Phenolic resin work surface with integrated retention tray and an ergonomic arm rest for a comfortable working position. High chemical and mechanical resistance. Ideal for precise weighing operations.



#### Inox 304L work surface

Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.

Only available for models: 321, 391, 483, 714

## Work bench



#### Mobicap

Metal work bench, equipped with four wheels, two of which are selflocking. Allows the device to be moved with complete safety.

Only available for models 321-391



Fixed metal work bench. Equipped with four adjustable feet allowing the unit height to be adjusted.



## Benchcap optional equipment

Benchcap furniture with phenolic resin work surfaces offer multiple equipment solutions for fluids (such as a swan neck, etc.), as well as for technical gases and energy (such as nozzles on backsplash, etc.).

Get in touch to discuss tailoring your hood to your needs.



#### Shelf option

Internal, semi-removeable, metal Benchcap shelf.

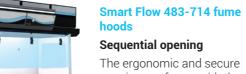
## Type of opening



# Smart Flow 321-391 fume

## Oblong opening

The ergonomic and secure opening conforms with the standard.



opening conforms with the standard.

## **WORK SURFACES**

For Erlab fume hoods.



Work surfaces	Glass work surface	Inox 304L work surface	Phenolic resin work surface
Solvents	000	000	000
Acids	•••	•	• •
Excluding hydrofluoric acid	8	8	•
Sodium hypochlorite (bleach)	•••	8	•
Impact resistant	•	••	•••
Scratch resistant	•••	•	•
Load capacity	50 kg/m²	110 kg/m²	110 kg/m²
Load resistant		•	<b>⊕ ⊕</b>
Ease of cleaning	• •	•••	000
Stability	•	•	• •
Equipment available	N/A	N/A	Sinks, taps (contact us for more information)

**Erlab**®





## **CHEMICAL STORAGE**

# Captair® FILTERING STORAGECABINETS

**Filtering storage cabinets** provide excellent filtration quality to protect users from chemical hazards. Their technology is suitable for all types of chemicals.

Equipped with transparent doors, they offer users an optimal view of the products stored inside, and warn them in case of prolonged opening to limit inhalation risks. Erlab's new range of connected cabinets employ **Smart technology** as a simple and innovative means of communication. Using light pulses and being simple and intuitive to use, this communication interface allows operators to focus all their attention on what is important: their work.

## Flex® technology

The combination of molecular and particulate filtration technologies enables one single device to be configured for the laboratory's protection needs. This has been made possible by the design of single dimension filter cartridges which, through vertical stacking, represent a major innovation in the range. This innovation from the Erlab R&D laboratory offers unprecedented flexibility, adaptability and savings.

## Easy to relocate

Erlab solutions can be moved easily within a laboratory to suit your protection needs, without affecting the ventilation balance of the room.

## Safe storage

Store your chemicals securely with a lock and key system.

### Low consumption -

Very low energy consumption limits the operational cost.

#### Storage

Transparent doors offer an optimal view of the storage space. Multiple ergonomic storage solutions, including removable shelves, pull-out doors and drawers.



Light and sound pulses inform the user about their level of protection. Different light and sound pulses also inform them of the device's operational status in real time.

#### Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

#### eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

#### Detection

The exclusive detection system constantly monitors the filtration fault status.

#### Door sensor

For optimal safety, opening the door triggers an increase in air velocity. In cases of prolonged opening, the alarm is triggered to warn the user and limit their risk of inhalation.









Flexible and ductless filtration solutions



Air flow rate 10 m<sup>3</sup>/h

Voltage/frequency

110-230 V / 50-60 Hz

Power consumption 12 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents

#### Storage capacity Sliding doors:

About 72 x 20 ml bottles or About 10 x 500 ml bottles

#### Structure

Corrosion resistant and electro-galvanized steel, coated with thermosetting anti-acid polymer

Filtration module

Injected polypropylene







Air flow rate 10 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 16 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents

#### Storage capacity

Sliding doors: About 24 x 1L bottles (high shelves) / About 20 x 1L bottles (low shelves)

#### Structure

Corrosion resistant and electro-galvanized steel, coated with thermosetting anti-acid polymer

## Filtration module

Injected polypropylene



Liquids & Powders



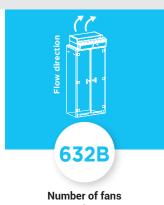
Tests and labelling (€







Flexible and ductless filtration solutions



Air flow rate 11 m³/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 20 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents

#### Storage capacity

Sliding doors: About 44 x 1L bottles Sliding shelf: About 25 x 1L bottles de 1L (tray)

About 35 x 100 ml bottles (shelf) About 70 x 50 ml bottles (shelf)

#### Structure

Corrosion resistant and electro-galvanized steel, coated with thermosetting anti-acid polymer

Filtration module Injected polypropylene

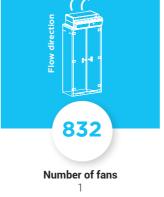


Tests and labelling ( €



Liquids & Powders





Air flow rate 70 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 35 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents.

#### Storage capacity Double doors/shelves:

120 glass bottles of 1L

#### Structure

Corrosion resistant and electro-galvanized steel, coated with thermosetting anti-acid polymer

Filtration module Injected polypropylene



Liquids







Flexible and ductless filtration solutions



Air flow rate 220 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 45 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents.

#### Storage capacity

Pull-out doors: 100 bottles of 1L Double doors/shelves: 120 bottles of 1L

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

Filtration module

Injected polypropylene



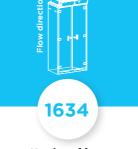
Liquids





Liquids & Powders





Number of fans

Air flow rate 220 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 45 W

#### Doors

Transparent and colourless PMMA with high optical purity. Strong resistance to numerous aggressive chemical agents.

#### Storage capacity

Pull-out doors: 200 glass bottles of 1L Double doors/shelves: 240 glass bottles of 1L

#### Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

Filtration module Injected polypropylene



\*Min/max height depending on the filtration column

Liquids















# **EQUIPMENT**

For Erlab filtering storage cabinets.

## Shelves



#### Shelves

Fixed and height-adjustable shelves (depending on the height of the bottles)

Integrated retention tray. Four-litre capacity.

Dimensions: 360 x 380 mm

## HCL sealed box



**HCL** sealed box

Sealed box for storing strong acids. (store box at the bottom of the cupboard)

## Keys



#### Secure storage with a lock and key system

Store your chemicals securely with a lock and key system.

## **Absorbent mat**



#### Absorbent mat

In addition to the retention tray on the shelf, the mat holds various chemicals to prevent them from spreading.

# **TYPE OF OPENING**

For Erlab filtering storage cabinets.

## Smart cabinets

## Double doors



#### Pull-out doors



**Erlab**®





## **CHEMICAL STORAGE**

# **Chemtrap® FILTRATION BOXES FOR FIRE-RESISTANT CABINETS**

**Filtration boxes** allow laboratories with a safety cabinet to combine fire protection with inhalation protection. Now compatible with many safety cabinets (Asecos, Duperthal, etc.) that have an air extraction diameter of 75, 80 or 100 mm. They eliminate the harmful fumes emitted from the products stored inside the cabinet\*. Thanks to their filtered air recirculation principle, they contribute to the purification of the ambient air. They require no ductwork and can be connected quickly and easily by connecting to your safety cabinet.

## There are two filtration boxes available:

**H402:** for fire-resistant safety cabinets and high or low storage cabinets.

**V201:** for fire-resistant safety cabinets and storage under a bench.

## Filtration -

The filtration box contributes to the purity of the air in the laboratory.

Filtering the air inside the storage cabinet, it captures toxic vapours at source and circulates clean air through the laboratory, contributing to a better and safer working environment.

## Safety cabinet

The system transforms any fire-resistant cabinet or other chemical storage cabinet into a safety cabinet with standalone filtration. No ductwork is required.

## eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Easy to relocate

Quick and easy installation. Small space requirement. **(V201)** 

Quick and easy installation. Handle for easier transport and installation. **(H402)** 



Light and sound pulses inform the user about their level of protection. Different light and sound pulses also inform them of the device's operational status in real time.

## Detection

The exclusive detection system constantly monitors the filtration fault status.

## Connection

A flexible air duct connects the filtration box and the fire-resistant cabinet. **(V201)** 

Four connection options: left, right, at the back or underneath. (H402)

## Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

## Low consumption

Very low energy consumption. Reduces running costs.





Liquids

Liquids & Powders





Flexible and ductless filtration solutions



Number of fans

Air flow rate 60 m<sup>3</sup>/h

**Voltage/frequency** 110-230 V / 50-60 Hz

Power consumption 20 W

Flexible duct connection 1 metre

Structure Coated and corrosion resistant steel (100% polyester)

> Filtration module Injected polypropylene







Air flow rate 35 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 15 W

Flexible duct connection 1 metre

Structure Coated and corrosion resistant steel (100% polyester)

Filtration module Injected polypropylene



Liquids Liquids & Powders







Flexible and ductless filtration solutions

## **FILTRATION BOXES**

There are two versions of Erlab filtration boxes available.

# **H402**For high or low cabinets





Connection: at the back, right or left.

## **EQUIPMENT**

For Erlab filtration boxes

## Flexible duct connection



## Filtration box duct connection

Adjustable and flexible air duct that connects easily to your storage cabinet's air outlet.

## **FILTRATION BOXES**

There are two versions of Erlab filtration boxes available.

## **V201**

For cabinets under a bench





Connection: at the back.

## **EQUIPMENT**

For Erlab filtration boxes

Flexible duct connection



## Filtration box duct connection

Adjustable and flexible air duct that connects easily to your storage cabinet's air outlet.

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**Erlab**®





## **HALO AIR PURIFIERS**

(Ceiling installation)

## Halo AIR PURIFIERS

Halo air purifiers, installed on the ceiling, capture pollutants in the laboratory air or other rooms at source and trap them permanently in molecular filters or high efficiency particulate filters. An ideal solution for reducing air renewal costs, Erlab's air purifiers ensure excellent air quality in laboratories or other rooms of your building, without the need for unwarranted air renewal and the ensuing high levels of energy consumption. Available in four versions so as to filter many pollutants, Erlab's Halo air purifiers monitor the air quality of laboratories or other rooms where it is installed, in real time and filter the ambient air, in order to maintain an optimal level of hygiene and safety.

As a standalone system, completely independent of a building's ventilation system, Erlab's air purifiers can be easily installed, in the ceiling, in any buildings. Equipped with **Smart technology**, they allow you to monitor your room's air quality remotely, through your mobile phone. This connectivity also means that you benefit from exclusive guarantees and services.

## Detection -

A dedicated air quality sensor (HALO 32-1C only).

## Embedded software -

Connect your device directly to your computer using an RJ45 cable to access information on your device.

## eGuard -

**Connect to the eGuard interface** to control and monitor your protection settings remotely.

## Clean air diffusers

Four clean air diffusers provide uniform circulation of air throughout the room.

## Air quality

Air purifiers provide a high level of air quality without having to connect to a central HVAC system. They also generate substantial energy savings.

## Low consumption

Very low energy consumption. Reduces running costs.



**HALO 35** 

## Smart technology

Light and sound pulses inform the user about their level of protection. Different light and sound pulses also inform the user about the ambient air quality in real time.

## Ceiling installation

Safer and more effective. Both good reasons for placing the air purification station in the center of your ceiling. In this location it will also be protected from the movement of people in the room and situated among the airborne droplets that mainly circulate in the upper part of the room.

## Easy access

Easy access to the chamber to replace the filters.

## Filtration

Air purifiers guarantee the decontamination of the air in any laboratory, office or classroom against all chemical, viral and bacterial pollutants.







Flexible and ductless filtration solutions



Number of fans

Air flow rate 220 m<sup>3</sup>/h

**Voltage/frequency** 110-230 V / 50-60 Hz

Power consumption 50 W

## Mode of operation

24/7, Day/Night Min/max detection, detection value only

## Weight (kg) 31 kg (including filter)

## Volume protected

55 m<sup>3</sup> or a surface area of approximately 25 m<sup>2</sup> with a ceiling height of 2.20m

## Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

Filtration module

Injected polypropylene



Tests and labelling ( E

**External** L 592 x D 892 x H 303

particles

Gases and airborne





## Number of fans

Air flow rate 300 m<sup>3</sup>/h

Voltage/frequency 110-230 V / 50-60 Hz

Power consumption 50 W

Mode of operation 24/7, Day/Night

Weight (kg) 31 kg (including filter)

## Volume protected

70 m <sup>3</sup> or a surface area of approximately 30 m<sup>2</sup> with a ceiling height of 2.50m

## Structure

Electro-galvanized and corrosion resistant steel, coated with thermosetting anti-acid polymer

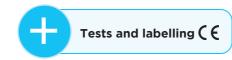
## Filtration module

Injected polypropylene



Gases and airborne particles

Dimensions (mm): **External** L 592 x D 892 x H 303



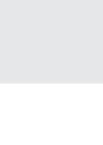


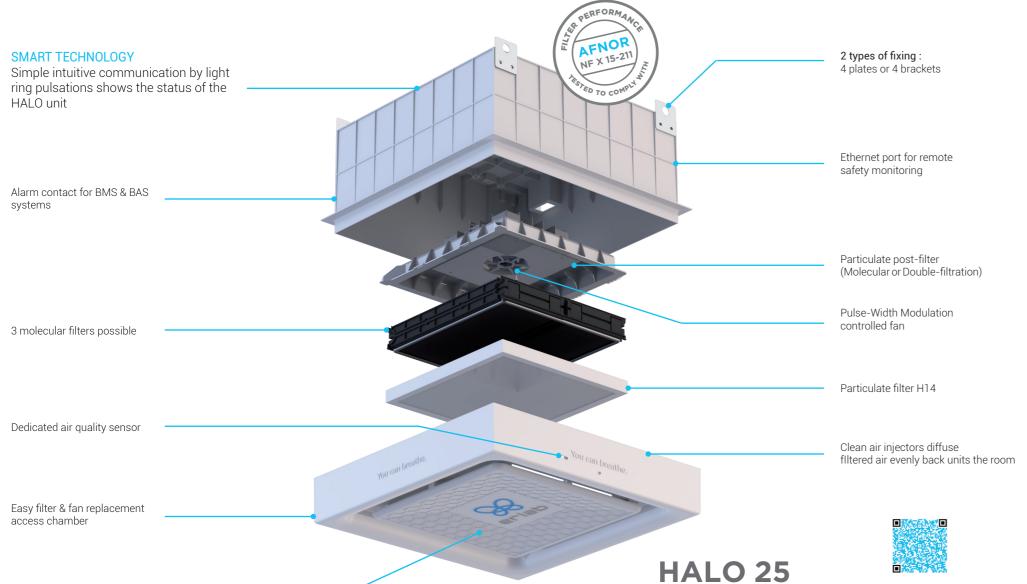






Flexible and ductless filtration solutions







## Number of fans

Air flow rate 110 m<sup>3</sup>/h

Voltage/frequency 110-230 V 50/60 Hz

Power consumption 20 W

Mode of operation 24/24h - 7/7, Night/Day, Min Max detection, Detection value only

Weight (kg) 17,5 kg (filter included)

## Volume protected

22,5m<sup>3</sup> or a surface area of 9m<sup>2</sup> with a ceiling height of 2m50

## Structure

ABS (Acrylonitrile Butadiene Styrene) / Injected polypropylene

## Filtration module

Injected polypropylene





Tests and labelling ( E







Flexible and ductless filtration solutions



Number of fans

Air flow rate 150 m<sup>3</sup>/h

**Voltage/frequency** 110-230 V 50/60 Hz

Power consumption 20 W

## Mode of operation

24/24h - 7/7, Night/Day, Min Max detection, Detection value only

## Weight (kg) 14,5 kg (filter included)

## Volume protected

30m<sup>3</sup> or a surface area of 12m<sup>2</sup> with a ceiling height of 2m50

## Structure

ABS (Acrylonitrile Butadiene Styrene) / Injected polypropylene

> Filtration module Aluminum



Gases and airborne particles







Air flow rate 110 m<sup>3</sup>/h

Voltage/frequency 110-230 V 50/60 Hz

Power consumption 35 W

Mode of operation 24/24h - 7/7, Night/Day, Min Max detection, Detection value only

with a ceiling height of 2m50

## Structure

ABS (Acrylonitrile Butadiene Styrene) / Injected polypropylene

## Filtration module

Injected polypropylene / Aluminum



**External** L 615 x P 615 x H 350

Gases and airborne particles



Tests and labelling ( E

**Erlab**®





## REMOVAL OF AIR POLLUTION

## Halo Sense AIR QUALITY SENSOR

Halo Sense air quality sensors monitor the air quality in your laboratory in real time. Available in **two different versions**, they are able to detect a wide spectrum of pollutants and vapours, including Volatile Organic Compounds (VOC) and acid vapours. If pollution is detected, the sensors alert the user immediately via light and sound pulses.

Halo Sense air quality sensors are very easy to install in all laboratories. Equipped with Smart technology, they allow you to monitor your laboratory's air quality remotely, through your mobile phone. This connectivity also means that you benefit from exclusive guarantees and services.

## Detection

## There are two Halo Smart Sense versions:

- VOC (Volatile Organic Compounds)
- Acids

## Air quality

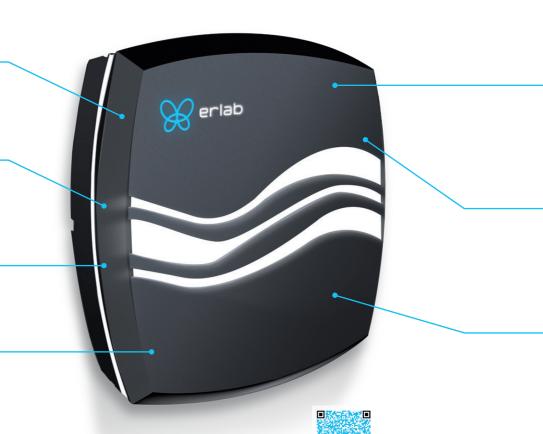
The Halo Sense Smart continuously monitors the air quality in your laboratory and detects ambient air pollution for a wide spectrum of pollutants and vapours.

## Easy to relocate

Quick and easy installation. Installation via removable turntable: wall, bench, ceiling

## Energy savings

The Halo Sense Smart can communicate with building management systems. If there is no pollution, it is possible to reduce overconsumption of clean air and the resulting energy consumption.



## Smart technology

Light and sound pulses inform the user about their level of protection. These light and sound pulses also inform the user about the air quality in the laboratory in real time.

## Embedded software

Connect your device directly to your computer using an RJ45 cable to access information on your device.

## eGuard

**Connect to the eGuard interface** to control and monitor your protection settings remotely.





**Acids** 

**Case** ABS

Power consumption 10 W

Voltage/frequency 110-230 V / 50-60 Hz

Detection Electrochemical sensor

> Weight (kg) 1 kg

Sensitivity

Three settings



Flexible and ductless filtration solutions



**Case** ABS

Power consumption

**Voltage/frequency** 110-230 V / 50-60 Hz

Detection Semiconductor sensor

Weight (kg)

Sensitivity Five settings

Coverage between 14 and 40 m<sup>2</sup>

Structure

Acrylonitrile Butadiene Styrene (ABS)

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Tests and labelling ( E



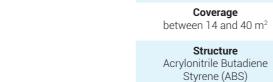
Dimensions (mm):

**External** L 181 x W 181 x H 67

**VOC**For the detection



of Volatile Organic Compounds





Dimensions (mm):

**External** L 181 x W 181 x H 67

Acids For the detection of acid vapours



Tests and labelling ( E





# PROTECTION OF INVESTIGATIONS

# TRANSPORTABLE AND DISPOSABLE Pyramid® GLOVE ENCLOSURE

Made of high-quality transparent PVC, the **Pyramid isolation enclosure** is a multi-functional, transportable and disposable "glove bag" for personal protection, as well as for the investigation and transportation of biological elements. Easily transportable, lightweight and assembled in a few seconds, it allows users to intervene anywhere, while being fully protected.

The inclined structure provides an ergonomic working position. Fully waterproof, it is ideal for any kind of field investigation, as well as for highly secure use in the laboratory. Each enclosure is highly resilient and is tested before being put on the market. Compressed air inflation is performed at a pressure of 2.5 mm Hg. A compliance certificate is provided. Each enclosure can be identified by its serial number.

## Safety

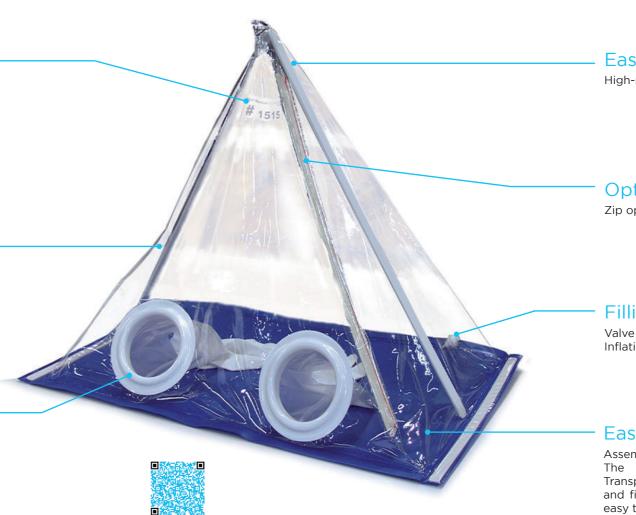
The Erlab glove bag is made of high-quality, resistant and transparent PVC and is designed for the protection of people, as well as the safe investigation and transportation of biological elements. To ensure maximum safety, each enclosure is tested before being put on the market. Compressed air inflation is performed at a pressure of 2.5 mm Hg. A compliance certificate is provided with each enclosure, which is identified by a serial number.

## Performance

Its quality construction makes it a vital tool for handling potentially contaminated objects, taking samples to different sites, working in an inert atmosphere, revealing fingerprints and, of course, protecting people from splashes during biopsies. Fully watertight and resistant, it keeps handlings free of dust and humidity.

## Gloves -

PVC medical gloves, assembled by high-frequency welding



## Easy transportation

High-resistance grommet for transporting and suspending the enclosure.

## Optimal impermeability

Zip opening and two-groove closure for an optimal seal.

## Filling valve

Valve for potential filling of the enclosure with an inert gas (Nitrogen). Inflation of the enclosure for normal use up to 2.5 mm Hg.

## Easy to install and use

Assembled in seconds, can be used anywhere.

The inclined structure provides an ergonomic working position. Transportable and light, this safety enclosure is suitable for many laboratory and field requirements. It is equipped with a flexible PVC packaging for easy transportation.







Flexible and ductless filtration solutions



## **Enclosure and base**

Flexible PVC, assembled by highfrequency welding

## Closure

Double-sealed groove (600 mm)

**Medical gloves** In butyl and PVC sleeves

## Usage temperature -25°C to +45°C

Weight (kg) 1.55 kg



## **USAGE EXAMPLES**

For the Erlab glove bag.







Handling on a wall



Handling on a work surface



Storage of several enclosures on a crossbar before analysing samples in the laboratory



eGuard



## **SERVICES**



**eGuard** allows you to monitor all of your devices remotely, and increases the safety of all users.

You can use the eGuard interface to connect your devices, including fume hoods, GreenFumeHood 3 fume cupboards, filtering storage cabinets and any other Erlab-connectable device. In just one glance, you can control the proper functioning of your equipment and the air quality in your laboratory remotely. That's our guarantee of enhanced safety.

## **Discover the following functions:**

- Consulting usage data
- Historical data access
- Alerts
- Control over all your devices

## **Statistics you can access:**

- Filtration: displays the number of events related to filtration quality.
- **Door/front opening:** displays the door or front opening percentage and the number of times the device is in containment alarm mode.
- **Temperature:** trend graph showing the temperature in the enclosure.
- **Humidity:** trend graph showing the humidity in the enclosure.



The selection of protective equipment depends on the risk to which the operator is exposed. This selection cannot be made without an in-depth risk assessment.

The **eValiQuest** service supports you throughout this process.

An expert chemist will help you to fill out the initial questionnaire to specify the handlings that you plan to carry out. Within 48 hours, our laboratory specialists will inform you of the type of device and filtration technology suitable for your use. We are committed to ensuring your protection by certifying the feasibility of your handlings.

A **ValiPass** usage certificate will indicate the specific chemicals used, the type of filter and the estimated service life for which your device has been validated.

# What is the eValiQuest service?

This digital tool for assessing the chemical hazards associated with your handlings enables you to configure the most suitable filtering fume hood for your activity. Our chemical experts will recommend the best solution which combines optimal equipment service life and your protection.



Learn more about our service on www.evaliquest.erlab.com





## **ERLAB MAINTENANCE**

Installation, Training and Maintenance Services.

## Simplified maintenance management

Assisted by our network of maintenance partners, Erlab Maintenance guarantees you optimal monitoring of all your devices.

This is so you can focus on your activities in the best possible conditions.

You also benefit from our **Erlab Safety Program** which includes **eValiQuest**, **ValiPass** and **ValiGuard**.

By subscribing to the Erlab offer, you gain access to the manufacturer's maintenance offer.

## An offer customised for you

Professional installation, optimised filter replacement, compliance checks and scheduled maintenance are essential to ensure maximum user safety, long-lasting equipment performance and control over operating costs.

Our services (Only in France)

## Installation and training

A certified technician will unpack and install your Erlab product in order to integrate it into your current installation and perform compliance checks. You will be trained on how to use it and its range of features, as well as in best practices so you can optimise the performance of your equipment.

## Our contract offer (Only in France)

The annual maintenance includes an analysis of the evolution of your handlings to ensure that your configuration corresponds to your use and is in accordance with ValiPass (risk analysis certificate).

Inspection of your device is carried out according to a strict protocol, ensuring compliance with the NF X 15-211 standard.

This maintenance includes checking the air face velocity, the filtration efficiency, as well as the dynamic flow through a smoke test.



# **eco**PROTECT®

# An Erlab service for the recovery of energy from used filters.

(Only in France)

Created in partnership with Sarp Industries, a subsidiary of Veolia Propreté, the EcoPROTECT™ service offers you a complete, safe and responsible solution for disposing of your used filters from your Erlab products.



Purchase your filters online at filters.erlab.com

Please contact us for more information.

# Did you know that your used filter could become a valuable source of energy?



## A specific treatment process

The used filters from your device are a special type of industrial waste. They must, as required by law, be collected and disposed of through an appropriate channel, which must guarantee the traceability of the disposal process, from collection to destruction.

## An appropriate disposal method

Your filter is disposed of by thermal treatment, which involves incineration at very high temperatures in specific incinerators for this type of waste.

## Your used filter is a precious resource.

Recovering the heat released by the thermal treatment of your used filter provides a source of energy. This energy provides an alternative to the use of natural resources which must be preserved. By making use of your used filter, you are reducing your environmental impact.



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