



Chemistry





# Flexible and ductless filtration solutions

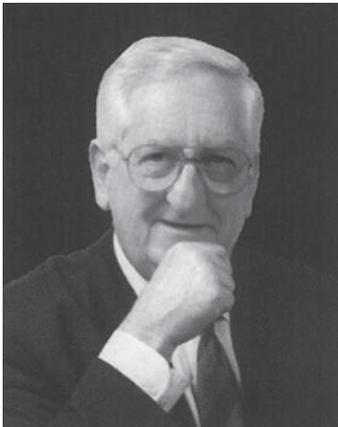
to ensure safety in laboratories  
and enclosed public spaces

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## 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.



*François P. Hauville: 1932 - 2011: Founder of Erlab*

Founded by François-Pierre Hauville, Erlab has been a family-owned company from day one. With its establishment in the USA in 1981, followed by China in 2004, Erlab has grown considerably and has been able to adapt with agility to a constantly changing world. Since the death of its founder in 2011, Stéphane Hauville, Antoine Hauville, Mrs. Marie Hauville and the 300 employees of Erlab perpetuate the tradition of innovation, a key value of the company, as well as the family spirit that is unique to it.



*Left: Stéphane Hauville: Chairman and CEO  
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.



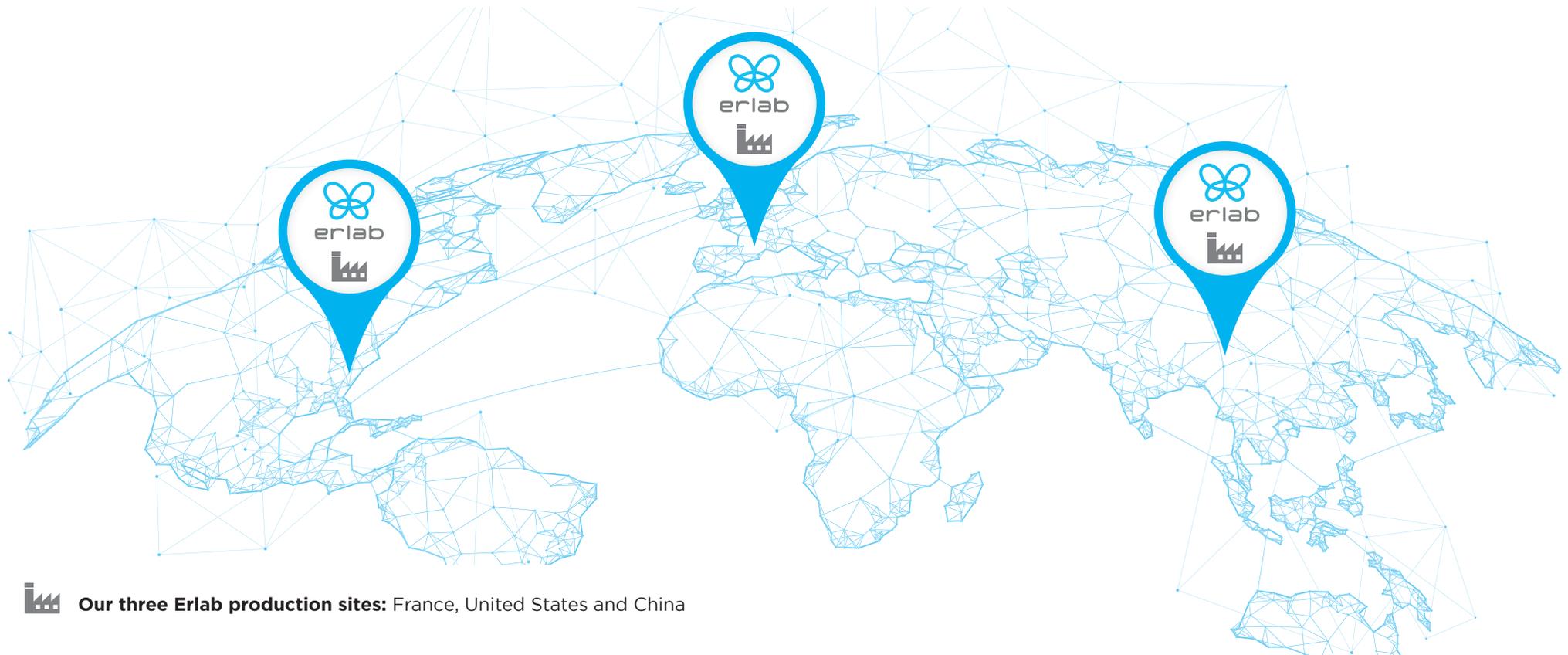
**Europe:** Erlab S.A.S. (France)



**North America:** Erlab, Inc. (USA)



**Asia:** Erlab Ltd (China)



 **Our three Erlab production sites:** France, United States and 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.

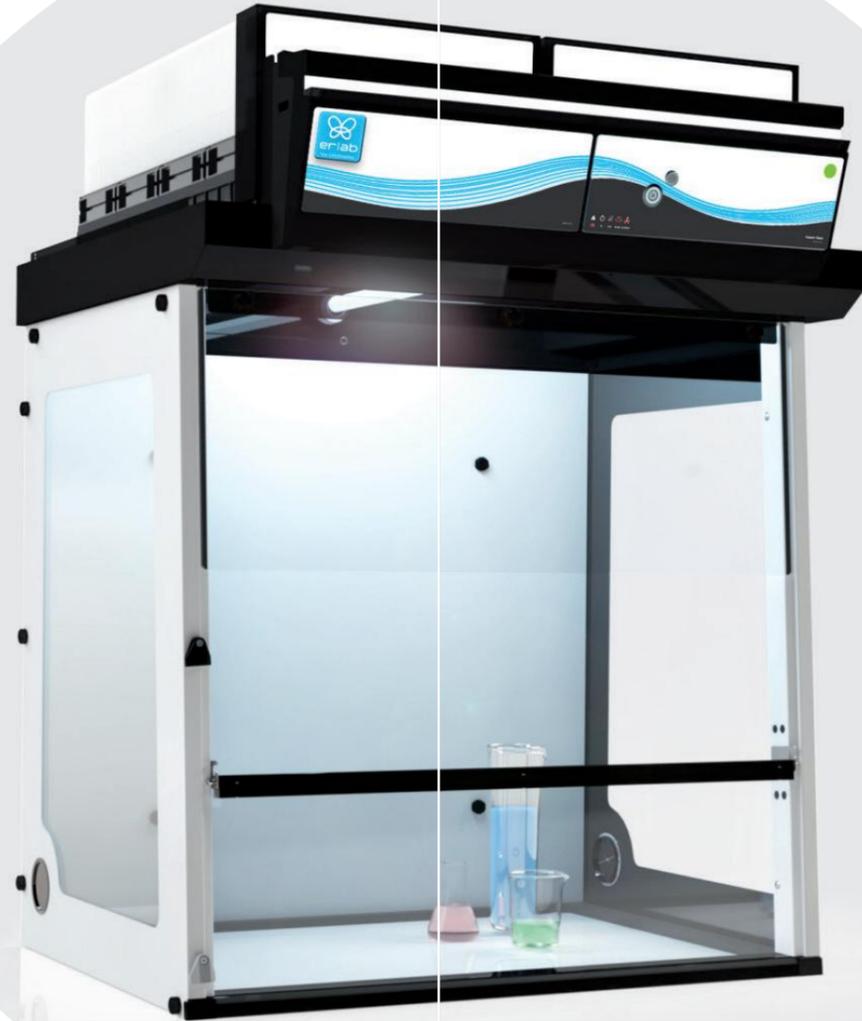
### Protect the environment

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.

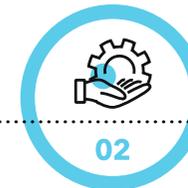
## THE QUALITY OF ERLAB PRODUCT DESIGN

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



### Research and development

Innovation  
Understanding your needs  
Developing new technologies



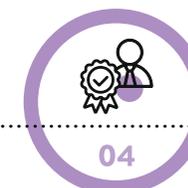
### Design

Ergonomic  
Flexible  
Practical  
New materials  
Filtration technology



### Production

Implementation  
Standardisation



### Guarantees

Optimal product definition  
Optimised safety  
Constant monitoring  
Preventative measures and maintenance  
Ten-year guarantee



### 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.

## THE ESP®

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

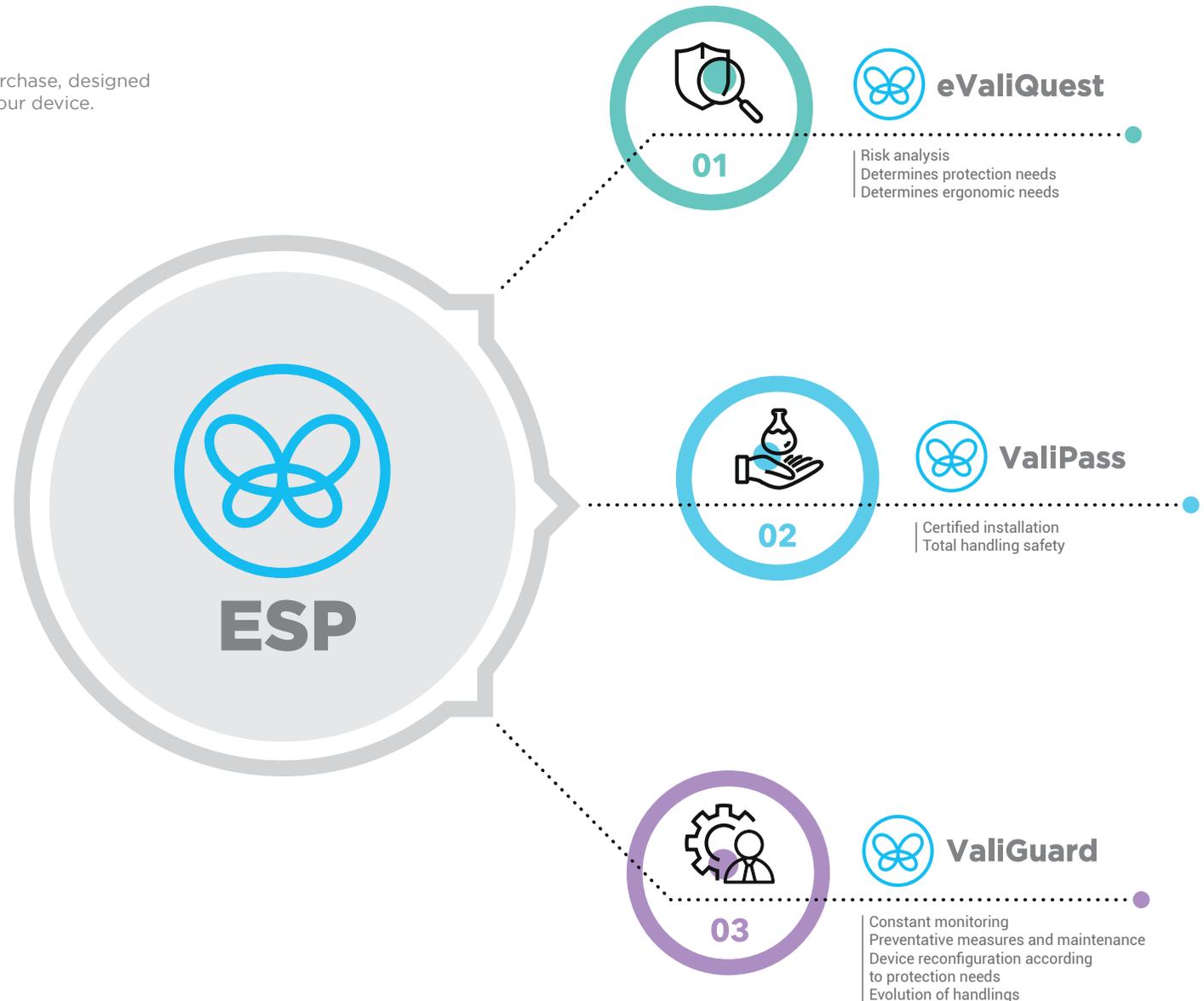
## WHAT IS THE ERLAB SAFETY PROGRAM?

### 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](http://www.erlab.com)



THE ESP®



 eValiQuest®

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.



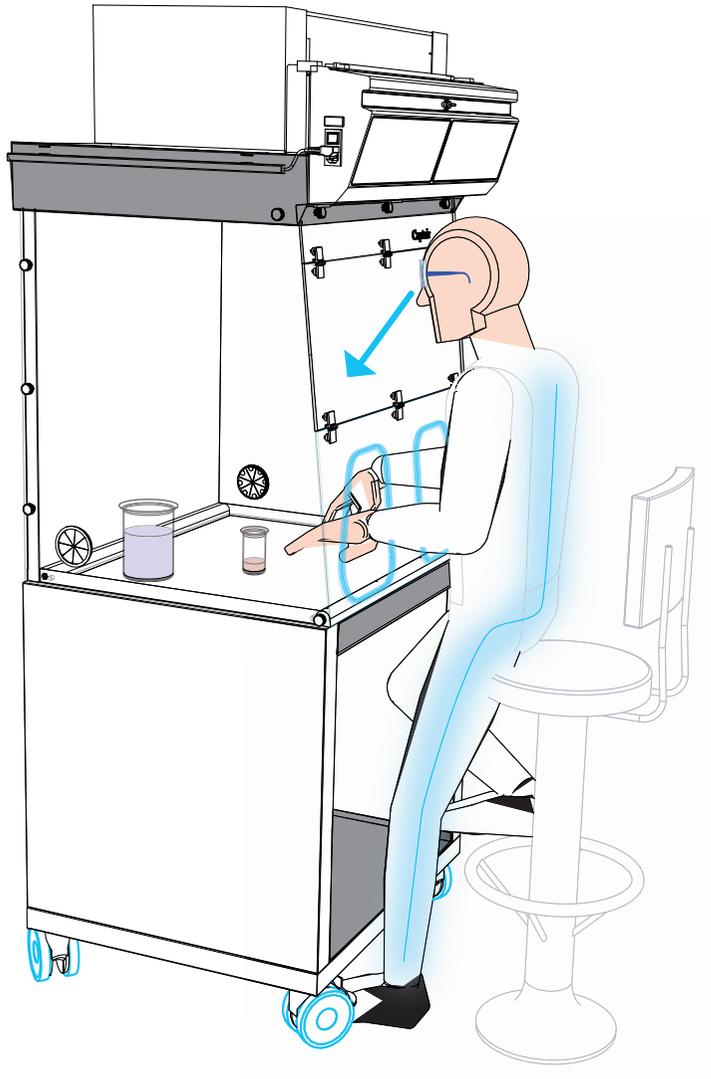
 ValiPass®

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®

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.



## 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 **Enclosures for Toxics using Recirculating Air Filtration**) 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:

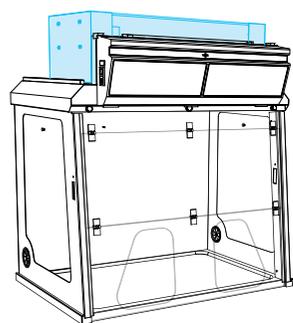
- Filtration efficiency
- Containment efficiency
- Air face velocity
- Documentation: **CHEMICAL LISTING\***

*\* Guide to filtered or retained chemicals*

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

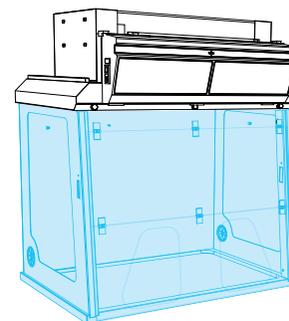
**Class 1:** Filtering fume hood with safety reserve, one main filtration level, one safety filtration level and continuous monitoring of filtration efficiency.

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



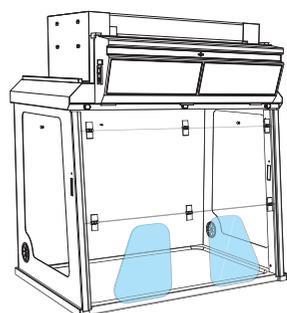
### Filtration efficiency

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



**AFNOR NF X 15-211 standard**

	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	Detection phase, during which the concentration downstream of the filters must be less than 1% of the TLV and during which the automatic filter failure detector must alert the user	Detection phase, during which the concentration downstream of the filters must be less than 50% of the TLV
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.**



European standard EN 14175-3



American standard ASHRAE 110:2016

## 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 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.

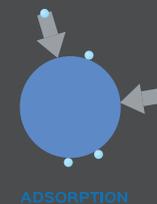
**This is possible thanks to the filtration technology that our Research and Development department has been continuously improving for over 50 years.**

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	
<b>AS</b>	For organic vapours
<b>BE/BE+</b>	Multipurpose for acid vapours + organic vapours
<b>F</b>	For formaldehyde vapours
<b>K</b>	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 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.

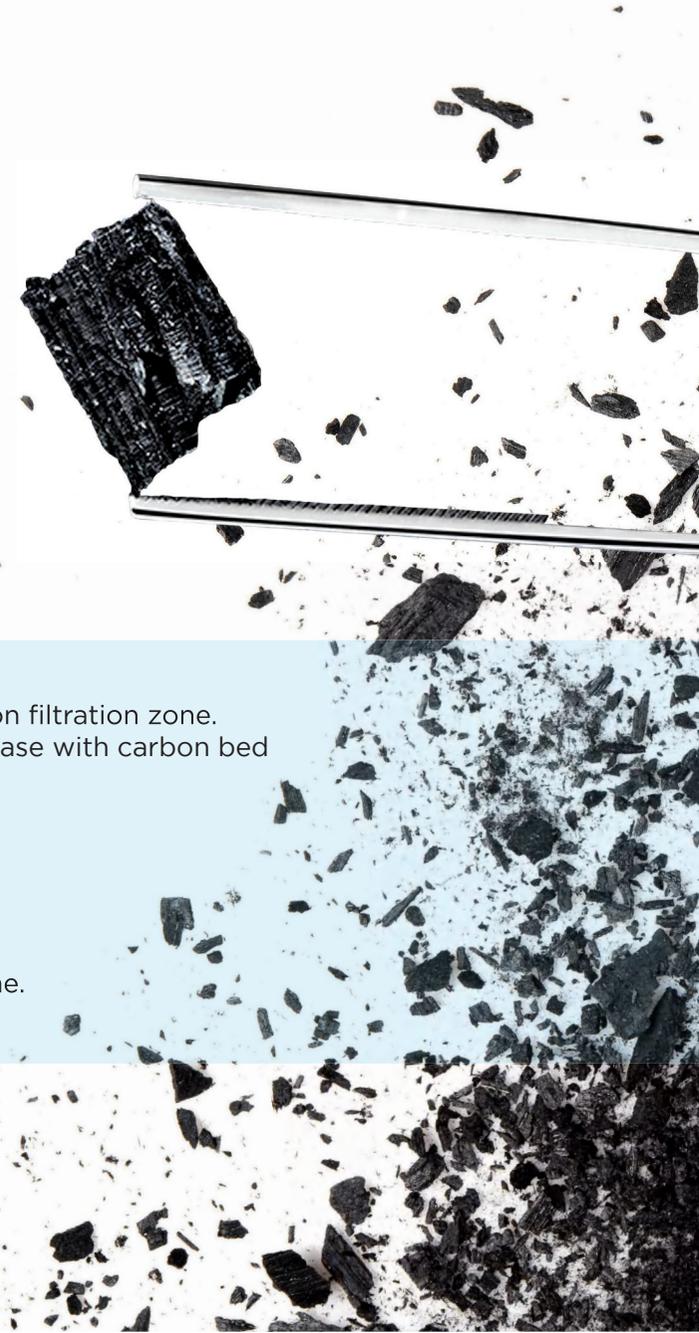


1

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

2

Prefiltration zone.

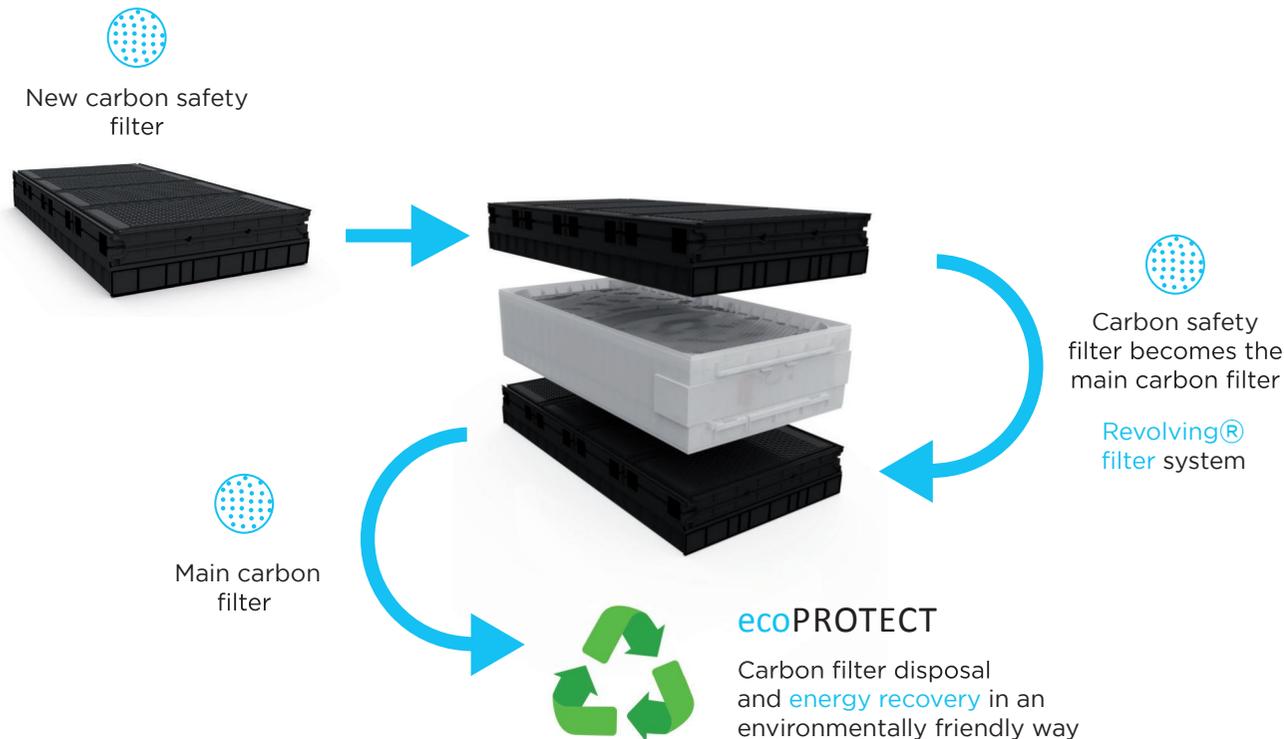


## REVOLVING® FILTER SYSTEM

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.



### 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

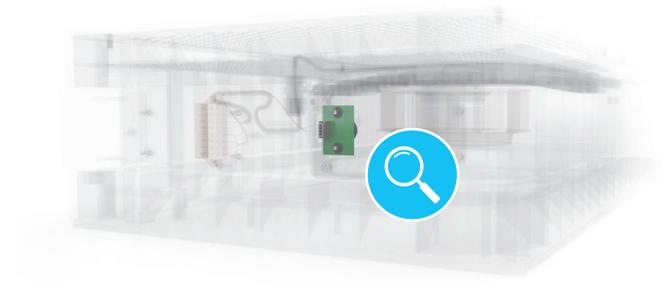
### Sensors

**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 enclosure 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.100).**



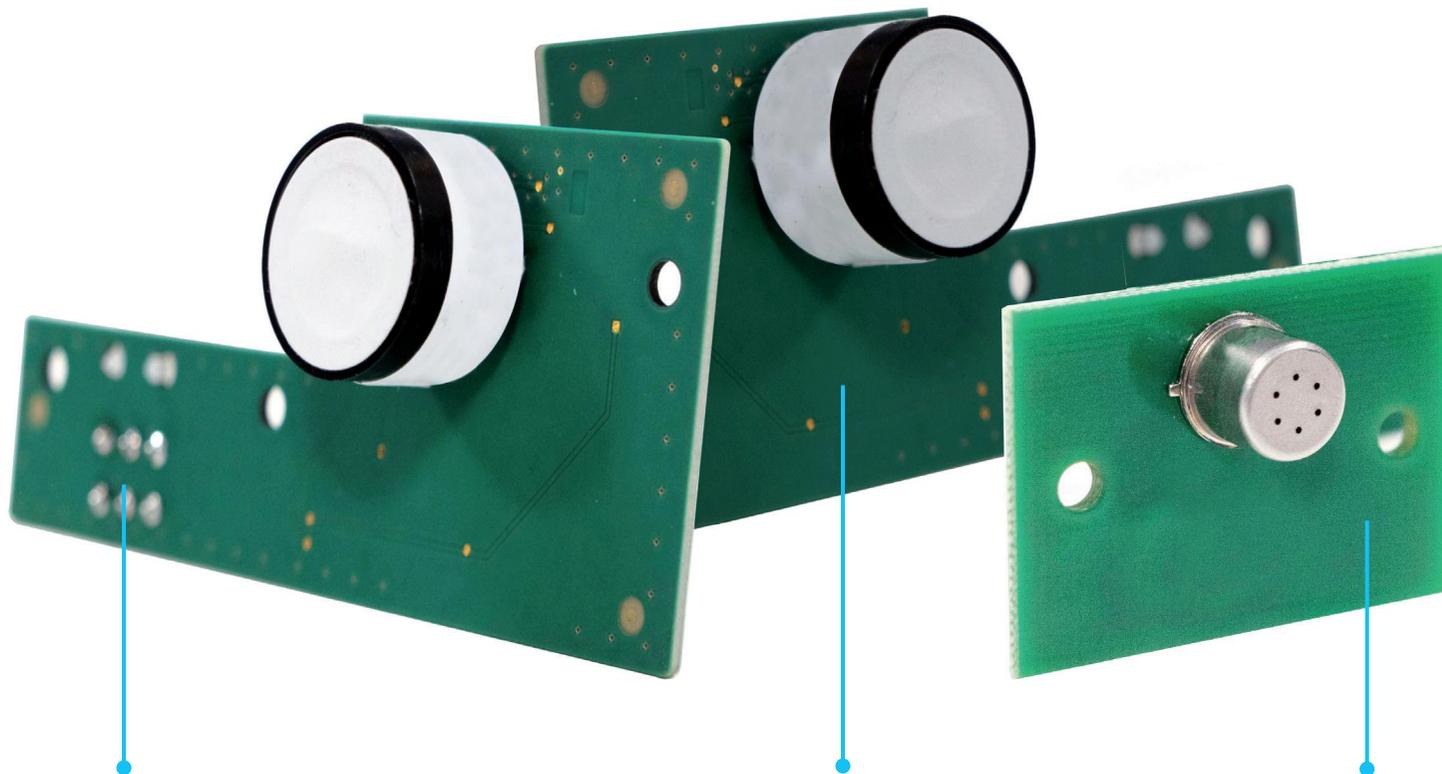
### Sensors

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

 <p><b>Formaldehyde</b> (Molecode F)</p>	 <p><b>Acids</b> (Molecode A)</p>	 <p><b>VOC</b> (Molecode S)</p>	<p><b>Anemometer</b></p>	<p><b>Tachometer</b></p>
<p>Filtration performance monitoring for Formaldehyde</p>	<p>Filtration performance monitoring for Acids</p>	<p>Filtration performance monitoring for COV</p>	<p>Air face velocity monitoring</p>	<p>Monitoring of fans</p>
<p>Included in accordance with the <b>eValiQuest</b> assessment. (Automatic online analysis of chemical hazards)</p>	<p>Included in accordance with the <b>eValiQuest</b> assessment. (Automatic online analysis of chemical hazards)</p>	<p>Included in accordance with the <b>eValiQuest</b> assessment. (Automatic online analysis of chemical hazards)</p>	<p style="text-align: center;">✓ Included</p>	<p style="text-align: center;">✓ Included</p>



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<sup>®</sup> TECHNOLOGY

US patent number 7,766,732 B.

### 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 **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.



**POWDERS**

For sieving, grinding, weighing, formulations, compressions, etc.



**LIQUIDS & POWDERS**

For solutions, filtration, extractions, etc.



**IN CLEAN ROOMS**

For clean rooms up to ISO class 7

**1C**



**1P**



**1P 1C**



**1C 1P**



**2C**



**2P**



**1P 2C**



**2C 1P**



**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**

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 the EN 1822-1 standard.



**Fan**

Ventilation module  
Ventilation regulation.  
Low energy consumption.  
Reduced noise level.



**1P 1C 1P**



## 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?



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



**Erlab®**

Flexible and connection-free filtration solutions



## CHEMICAL HANDLINGS AND PROTECTION OF THE HANDLER

### GreenFumeHood® 3 the 100% green alternative to ducted fume hoods

The **GreenFumeHood® 3** (GFH 3) is equipped with the revolutionary **Neutrodine® Unisorb filtration technology**, the result of over **50** years of continuous research in the R&D laboratories of Erlab in France. One single filter can retain a large spectrum of chemicals ( VOCs, polar VOCs, Acids, Formaldehyde, Amines, ...) which allows to perform in the GreenFumeHood a wide variety of chemical applications.

The **GFH 3 filtration technology** comply with several major standards: the **ANSI Z9.5**, the **CSA Z316.5-2020**, the **ASHRAE 110**, and the **AFNOR NF X15-211** which is the most stringent filtration standard in the world.

Unlike conventional ducted fume hoods, the **GFH 3** is **100% movable**, **100% energy saving** and **100% environmental friendly**.

## Proven safety!

### Filtration efficiency

During the lifetime of the filters, no chemicals are released into the laboratory. Erlab defines the filters are saturated and need to be changed when they release downstream of the filtration system 1% of the Permissible Exposure Limits (PELs) of the chemicals handled, which means 100% below the legal inhalation values. Saturation detection with sensors for solvents, acids or formaldehyde is done between 2 superposed filters, one main filters layer and one safety filters layer, which makes it possible to obtain this very high filtration safety. The safety of the chemists working in the lab room is absolutely secured.

### Filtration capacity

The **Neutrodine® Unisorb filter**, coupled with the filters revolving technology, increases its retention capacity and permit the filters life to reach up to 4 years.

### Containment efficiency

With an air velocity of 0.4 to 0.6m/s at the level of the sash opening and a quasil-aminar flow inside the enclosure, the containment of the chemical vapors handled inside the fume hood is perfectly secured before being routed to the high filtration efficiency system. The safety of the chemist in front of the sash opening is perfectly secured.



## Flexible filtration columns

Adaptable modular filtration column  
Compatible with a vast majority of  
laboratory procedures

## Low-energy lighting

Inside LED lamp (500 lux)

Transparent acrylic front panel,  
slide the sash vertically with ease

Side acrylic panels increase visibility

The 4° slanted front panel offers  
optimal visibility and an ergonomic  
work space



## Enhanced filtration system

Improved filtration efficiency & increased filter lifetime



## Smart technology

New Smart Command control module

## eGuard

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



**GFH3  
5300**

**Number of filtration columns**

3

**Number of fans**

3

**Air flow rate**

660 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

200 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** 



**Dimensions (mm):**

**Internal** L 1233 x D 742x H 1126\*

**External** L 1433 x D 968x H 1571/1661\*\*

Liquids



Powders



Liquids & Powders



Clean room



Possible uses

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



**Number of filtration columns**

4

**Number of fans**

4

**Air flow rate**

880 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

280 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** 



**Dimensions (mm):**

**Internal** L 1644x D 742x H 1126\*

**External** L 1849 x D 968x H 1571/1661\*\*

Possible uses

Liquids



Powders



Liquids & Powders



Clean room



\*Usable height of the work surface

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

## 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

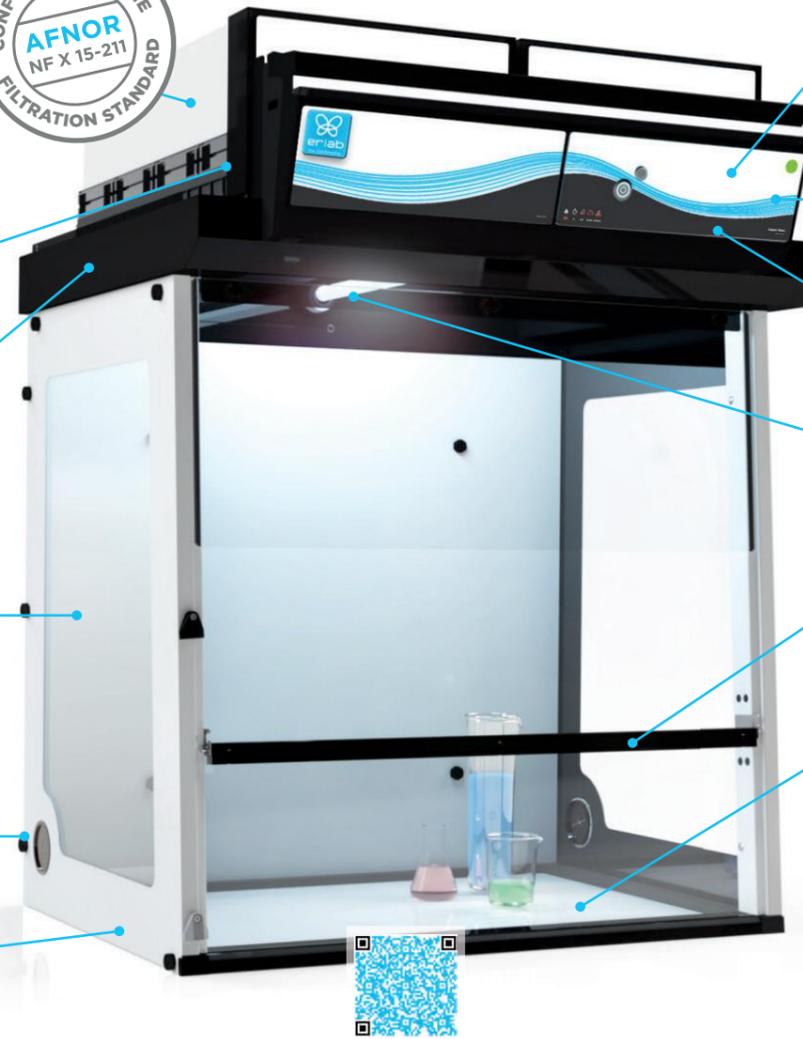
Erlab solutions are quick and easy to install. Unlike connected systems, they do not require a ventilation system linked to an air supply and extraction system to be installed. You just need one plug to get up and running, and you can get set up at any suitable moment, without complex planning.

#### 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.



**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 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

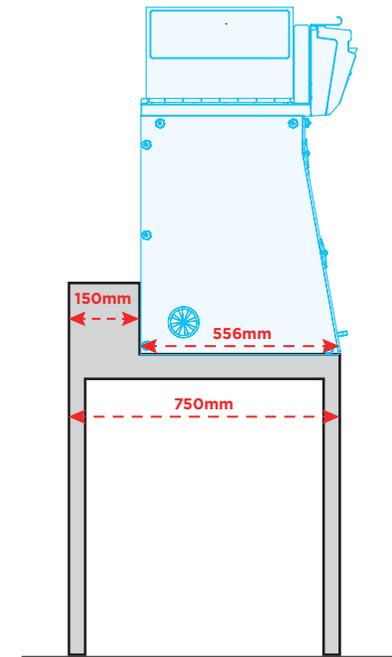
**Filtration module**

Injected polypropylene



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

It's depth is well adapted for benches with a rear service block



**Dimensions (mm):**

**Internal** L 764 x D 556x H 697\*

**External** L 800 x D 556x H 968/1154\*\*

Liquids



Powders



Liquids & Powders

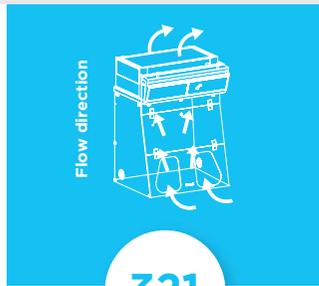


Clean room



Possible uses

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



**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 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** 



**Dimensions (mm):**

**Internal** L 764 x D 545x H 835\*

**External** L 800 x D 615 x H 1106/1292\*\*

Possible uses

Liquids



Powders



Liquids & Powders



Clean room



\*Usable height of the work surface

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



**391**

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 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** 



**Dimensions (mm):**

**Internal** L 969 x D 524 x H 835\*

**External** L 1005 x D 615 x H 1106/1292\*\*

Liquids



Powders



Liquids & Powders



Clean room



Possible uses



481

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 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** 



**Dimensions (mm):**

**Internal** L 1244 x D 524 x H 835\*

**External** L 1280 x D 615 x H 1106/1292\*\*

Liquids



Powders



Liquids & Powders



Clean room



Possible uses

\*Usable height of the work surface

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



632

**Number of filtration columns**

2

**Number of fans**

2

**Air flow rate**

440 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

125 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



**Dimensions (mm):**

**Internal** L 1566 x D 554x H 835\*

**External** L 1600 x D 615x H 1106/1292\*\*



**Tested according to ASHRAE 110:1995 and conforms with BS7989**

**Tests and labelling** 

Possible uses

Liquids



Powders



Liquids & Powders



Clean room



ISO 7

\*Usable height of the work surface

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



**392**

**Number of filtration columns**

2

**Number of fans**

2

**Air flow rate**

440 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

105 W

**Type of opening**

Reverso or sequential *see p.53*

**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** 



**Dimensions (mm):**

**Internal** L 897 x D 653 x H 1061\*

**External** L 1005 x D 750 x H 1332/1518\*\*

\*Usable height of the work surface

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

Possible uses

Liquids



Powders

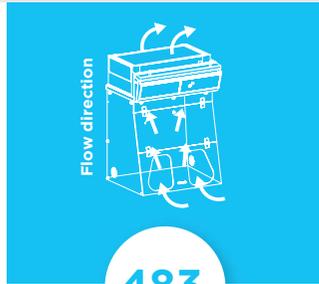


Liquids & Powders



Clean room





**Number of filtration columns**

3

**Number of fans**

3

**Air flow rate**

660 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

160 W

**Type of opening**

Reverso or sequential *see p.53*

**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** 



**Dimensions (mm):**

**Internal** L 1172 x D 653 x H 1061\*

**External** L 1298 x D 750 x H 1332/1518\*\*

Liquids



Powders



Liquids & Powders



Clean room



Possible uses

\*Usable height of the work surface

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



**633**

**Number of filtration columns**

3

**Number of fans**

3

**Air flow rate**

660 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

160 W

**Type of opening**

Reverso or sequential *see p.53*

**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



**Dimensions (mm):**

**Internal** L 1497 x D 653 x H 1061\*

**External** L 1620 x D 750 x H 1332/1518\*\*



**Tested according to ASHRAE 110:1995 and conforms with BS7989**

**Tests and labelling** 

Possible uses

Liquids



Powders



Liquids & Powders



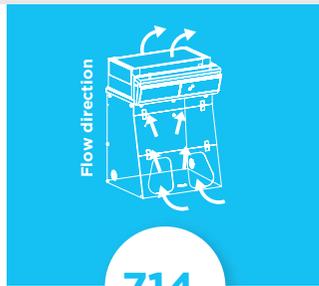
Clean room



ISO 7

\*Usable height of the work surface

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



714

**Number of filtration columns**

4

**Number of fans**

4

**Air flow rate**

880 m<sup>3</sup>/h

**Air face velocity**

0.4 to 0.6 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

220 W

**Type of opening**

Reverso or sequential *see p.53*

**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** 



**Dimensions (mm):**

**Internal** L 1697 x D 653 x H 1061\*

**External** L 1819 x D 750 x H 1332/1518\*\*

Liquids



Powders



Liquids & Powders



Clean room

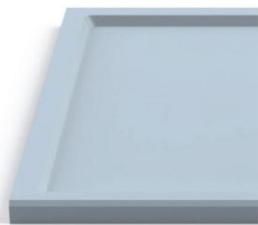


Possible uses

## EQUIPMENT

For our mobile and ductless hoods with Erlab's modular filtration columns.

### 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 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.

\*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.

### Work bench



#### Mobicap

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

Only available for models 321-391-392-481



#### 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, etc.) as well as an electrical socket.

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



#### Benchcap shelf option

Internal, semi-removeable, metal **Benchcap** shelf.

## 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<sup>6</sup> g during laboratory weighing.

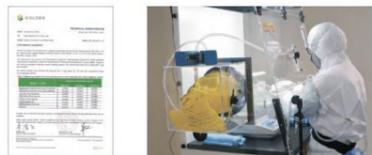
This is the ideal solution for high-risk operations that require a confined environment to eliminate any potential exposure of personnel to toxic products.

**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.

**OEB official tests:** The containment efficiency of the Captair weighing stations have been successfully tested by Golder Associates Consulting Ltd acc. to the ISPE1 guideline using a surrogate (lactose) with a Containment Performance Target (CPT) lower than 0.1 Qg/m<sup>3</sup>, corresponding to a safe protection level for highly dangerous OEB 52 chemicals.

**1 ISPE** = International Society for Pharmaceutical Engineering

**2 OEB** = Occupational Exposure Band expressing the danger of a chemical determined by a pharmaceutical company for chemicals which don't have an official Occupational Exposure Limit (OEL).



#### 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.

#### Waste port

It comes with a double waste bag and protective case.

#### 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.

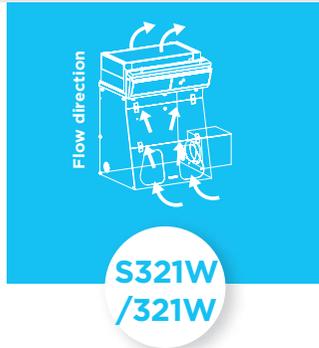
#### Easy installation

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.

#### 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.

**Laminar airfoils:** to soften the impact of air entrance on the balance



**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.3 to 0.5m/s

**Voltage/frequency**

100–240 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



**Containment tested according to the ISPE guideline**



Possible uses

Liquids & Powders



**Dimensions (mm):**

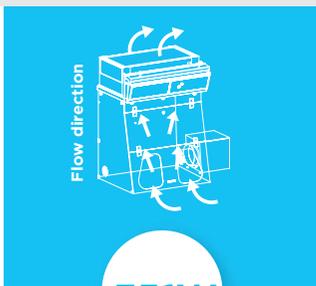
**Internal** L 699 x D 545xH (691\*S) / (830\*)

**External** L 800\*\*\* x D 615xH (968/1154\*\*S)/(1106/1292\*\*)

\*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



**351W**

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate**

220 m<sup>3</sup>/h

**Air face velocity**

0.3 to 0.5 m/s

**Voltage/frequency**

100–240 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



**Containment tested according to the ISPE guideline**

**Safety guaranteed up to OEB 5 chemicals**



OEL: Operator Exposure Limit  
OEL: Occupational Exposure Band

Possible uses

Liquids & Powders



**Dimensions (mm):**

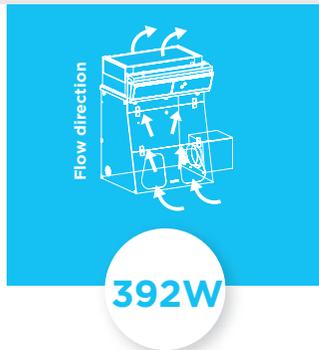
**Internal** L 819 x D 510 x H 685\*

**External** L 900\*\* x D 600x H 955/1140\*\*

\*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



**Number of filtration columns**

2

**Number of fans**

2

**Air flow rate**

440 m<sup>3</sup>/h

**Air face velocity**

0.3 to 0.5 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

105 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



**Containment tested according to the ISPE guideline**



**Dimensions (mm):**

**Internal** L 829 x D 653 x H 1061\*  
**External** L 1005\*\*\* x D 750 x H 1332/1518\*\*

**Safety guaranteed up to OEB 5 chemicals**



OEL: Operator Exposure Limit  
OEL: Occupational Exposure Band

Possible uses

Liquids & Powders



\*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



**Number of filtration columns**

3

**Number of fans**

3

**Air flow rate**

660 m<sup>3</sup>/h

**Air face velocity**

0.3 to 0.5 m/s

**Voltage/frequency**

100–240 V / 50–60 Hz

**Power consumption**

160 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



**Containment tested according to the ISPE guideline**

**Safety guaranteed up to OEB 5 chemicals**



OEL: Operator Exposure Limit  
OEL: Occupational Exposure Band

Possible uses

Liquids & Powders



**Dimensions (mm):**

**Internal** L 1104 x D 653 x H 1061\*

**External** L 1298\*\*\* x D 750 x H 1332/1518\*\*

\*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



#### Benchcap

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.) as well as an electrical socket.

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



\* The door can be swung open on the vertical axis 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.**

## CUSTOMIZED INSTRUMENTS & AUTOMATION FILTERING ENCLOSURES

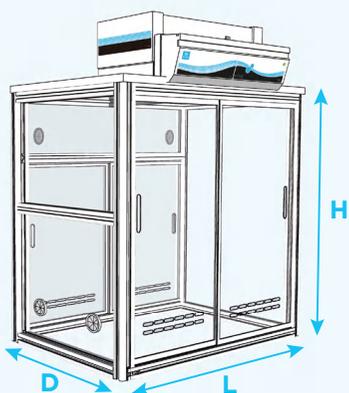
Designed to protect the chemists from chemical vapors or powders released by laboratory instruments and automated systems.

### Simple, aesthetic and fully customized

An **Erlab Instrument Enclosure** is made of high quality aluminium metal bar, coated with chemical resistant black epoxy resin paint. Its dimensions are appropriate to the instrument and the space required. It is delivered knocked down, simple and fast to assemble on site. Equipped with one or several Erlab filtration modules placed on top, with filters appropriate to the chemicals to be retained, the enclosure shall be connected to power to be immediately operational.



## CUSTOMIZED INSTRUMENTS & AUTOMATION FILTERING ENCLOSURES



### Enclosures dimensions (mm)

#### Benchtops enclosures

**L:** from 1000 mm to 2500 mm

**D:** from 750 mm to 1400mm

**H:** from 900 mm to 1400mm

#### Floor standing enclosures

**L:** from 1500 mm to 2200 mm

**D:** from 1000 mm to 1300 mm

**H:** from 1800 mm to 2300 mm



### Filtration box



Safety molecular filter

Ventilation & detection box

Main molecular filter

Optional particle filter HEPA

The filtration system placed on top of the enclosure is composed of 1 to 4 filtration columns, depending on the length of the enclosure and the quantity of chemicals to be filtered. Each column is made of filter appropriate to the types of chemicals used with the instrument.

Main specification Enclosure	
Structure	Aluminium bar anodized coated black epoxy paint
Sliding doors front and rear	4 sliding doors made of transparent acrylic panels 8 mm thickness
Side panels	Fixed transparent acrylic panels 8 mm thickness
Entry ports for utilities	4 entry ports covered with a removable PVC cap located in the side panels

Filtration system	
Number of filtration columns	1 to 4 depending on the length of the enclosure
Ventilation box	1 per column delivering 220 m <sup>3</sup> /H per column
Molecular filters for gaseous chemicals	GF4AS for Solvents GF4BE+ for acids & solvents GF4 F for Formaldehyde GF4 K for ammonia

## CHEMICAL STORAGE

### Captair® FILTERING STORAGE CABINETS

**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.



#### Smart technology

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.



531

**Number of fans**

1

**Air flow rate**

10 m<sup>3</sup>/h

**Voltage/frequency**

100-240 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



**Dimensions (mm):**

**External** L 500 x P 240 x H 400

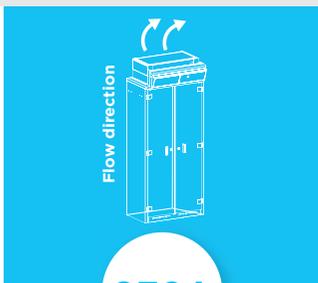


**Tests and labelling** CE

Possible uses

Liquids





**632A**

**Number of fans**

1

**Air flow rate**

10 m<sup>3</sup>/h

**Voltage/frequency**

100-240 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



**Dimensions (mm):**

External L 603 x P 451 x H 685

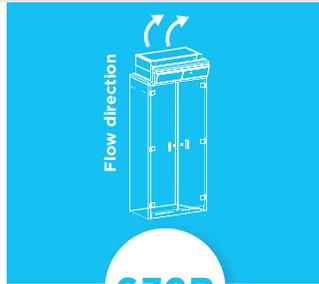


**Tests and labelling** CE

Possible uses

Liquids & Powders





**632B**

**Number of fans**

1

**Air flow rate**

11 m<sup>3</sup>/h

**Voltage/frequency**

100-240 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



**Dimensions (mm):**

**External L 654 x P 581 x H 715**

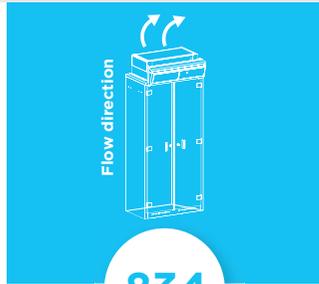


**Tests and labelling CE**

Possible uses

Liquids & Powders





834

**Number of fans**  
1

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

**Voltage/frequency**  
100–240 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

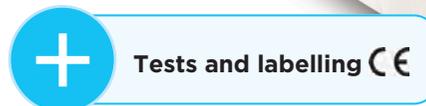
Double doors/shelves:  
120 bottles of 1L

#### Structure

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

#### Filtration module

Injected polypropylene



**Dimensions (mm):**  
External L 900 x D 653 x H 2138/2323

Possible uses





**1634**

**Number of fans**  
1

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

**Voltage/frequency**  
100–240 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



**+** **Tests and labelling** 



**Dimensions (mm):**  
**External** L 1802 x D 653 x H 2138/2323\*

\*Min/max height depending on the filtration column

Possible uses

- Liquids 
- Powders 
- Liquids & Powders 

## 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.

## 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)**



H402



V201

#### Smart technology

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)**

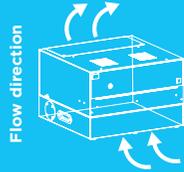
Four connection options: left, right, at the back or underneath. **(H402)**

#### 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.



**H402**

**Number of fans**  
1

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

**Voltage/frequency**  
100–240 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



**Dimensions (mm):**  
**Open** L 490/542\* x D 520 x H 464  
**Closed** L 490/542\* x D 520 x H 326

\*Min/max width depending on the type of connection



**Tests and labelling** CE

Possible uses

Liquids



Liquids & Powders





**V201**

**Number of fans**  
1

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

**Voltage/frequency**  
100-240 V / 50-60 Hz

**Power consumption**  
15 W

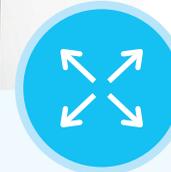
**Flexible duct connection**  
1 metre

**Structure**  
Coated and corrosion resistant steel (100% polyester)

**Filtration module**  
Injected polypropylene



**Tests and labelling** CE



**Dimensions (mm):**

**Open** L 245 x D 1004 x H 632

**Closed** L 245 x D 554 x H 632

Possible uses

Liquids



Liquids & Powders



## 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.

## 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 35-1C 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

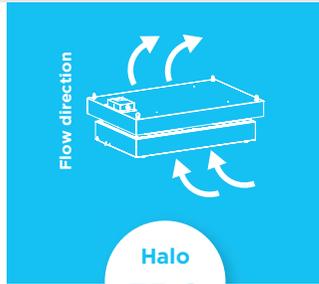
Safer and more effective. Both good reasons for placing the air purification station in the center of your ceiling. In this location it will also be protected from the movement of people in the room and situated among the airborne droplets that mainly circulate in the upper part of the room.

### 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.



**Number of fans**  
1

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

**Voltage/frequency**  
100–240 V / 50–60 Hz

**Power consumption**  
50 W

**Mode of operation**  
24/7, Day/Night  
Min/max detection,  
detection value only

**Weight (kg)**  
36 kg (including filter)

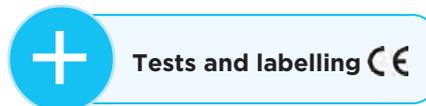
**Volume protected**  
55 m<sup>3</sup> or a surface area  
of approximately 25 m<sup>2</sup> with  
a ceiling height of 2.20m

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

**Filtration module**  
Injected polypropylene



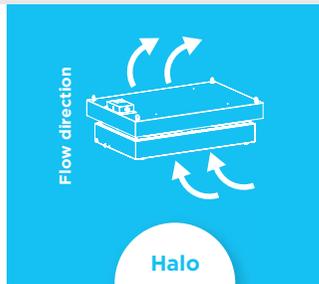
**Dimensions (mm):**  
External L 592 x D 892 x H 303



Possible uses

Gases and airborne particles





**Halo  
35 P**

**Number of fans**  
1

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

**Voltage/frequency**  
100–240 V / 50–60 Hz

**Power consumption**  
50 W

**Mode of operation**  
24/7, Day/Night

**Weight (kg)**  
30 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



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



Possible uses

Gases and airborne particles



## SMART TECHNOLOGY

Simple intuitive communication by light ring pulsations shows the status of the HALO unit

Alarm contact for BMS & BAS systems

3 molecular filters possible

Dedicated air quality sensor

Easy filter & fan replacement access chamber

Prefilter



2 types of fixing :  
4 plates or 4 brackets

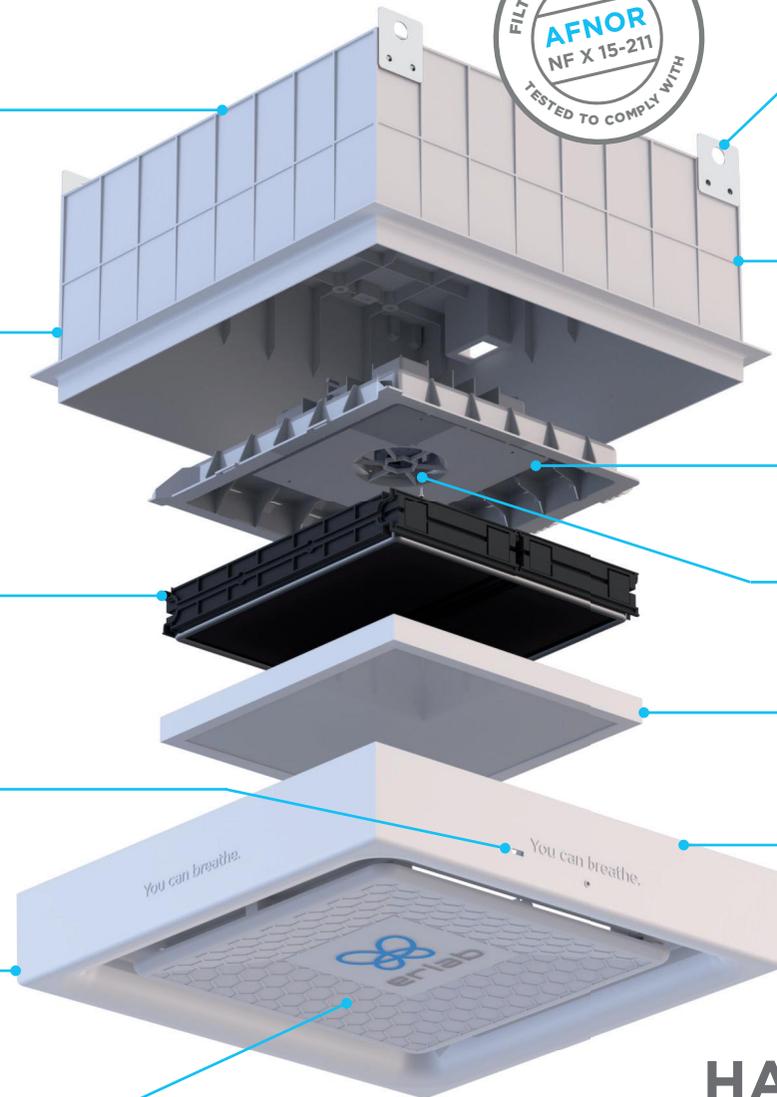
Ethernet port for remote safety monitoring

Particulate post-filter  
(Molecular or Double-filtration)

Pulse-Width Modulation controlled fan

Particulate filter H14

Clean air injectors diffuse filtered air evenly back into the room



# HALO 25





**Halo  
25 C**

**Number of fans**  
1

**Air flow rate**  
110 m³/h

**Voltage/frequency**  
100-230 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)

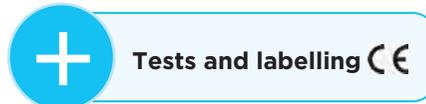
**Volume protected**  
22,5m³ or a surface area of 9m²  
with a ceiling height of 2m50

**Structure**  
ABS (Acrylonitrile Butadiene  
Styrene) / Injected polypropylene

**Filtration module**  
Injected polypropylene



**Dimensions (mm):**  
External L 615 x P 615 x H 350



Possible uses

Gases and airborne  
particles





**Number of fans**  
1

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

**Voltage/frequency**  
100-230 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)

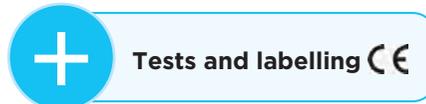
**Volume protected**  
30m<sup>3</sup> or a surface area of 12m<sup>2</sup>  
with a ceiling height of 2m50

**Structure**  
ABS (Acrylonitrile Butadiene  
Styrene) / Injected polypropylene

**Filtration module**  
Aluminum



**Dimensions (mm):**  
External L 615 x P 615 x H 350



Possible uses

Gases and airborne  
particles





**Halo 25**  
Bifiltration

**Number of fans**  
1

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

**Voltage/frequency**  
100-230 V 50/60 Hz

**Power consumption**  
35 W

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

**Weight (kg)**  
19 kg (filter included)

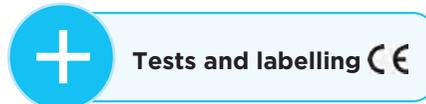
**Volume protected**  
22,5m<sup>3</sup> or a surface area of 9m<sup>2</sup>  
with a ceiling height of 2m50

**Structure**  
ABS (Acrylonitrile Butadiene  
Styrene) / Injected polypropylene

**Filtration module**  
Injected polypropylene /  
Aluminum



**Dimensions (mm):**  
External L 615 x P 615 x H 350



Gases and airborne  
particles



Possible uses

## 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 **three different versions**, they are able to detect a wide spectrum of pollutants and vapours, including Volatile Organic Compounds (**VOC**), **acid** and **Formaldehyde** 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 three Halo Smart Sense versions:**

- VOC (Volatile Organic Compounds)
- Acids
- Formaldehyde

#### 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.





Halo Sense  
VOC

**Case**  
ABS

**Power consumption**  
10 W

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

**Detection**  
Semiconductor sensor

**Weight (kg)**  
1 kg

**Sensitivity**  
Five settings

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

**Structure**  
Acrylonitrile Butadiene  
Styrene (ABS)



**Dimensions (mm):**  
External L 181 x W 181 x H 67

Possible detections

**VOC**  
For the detection  
of Volatile Organic  
Compounds



Tests and labelling 



**Halo Sense  
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

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

**Structure**  
Acrylonitrile Butadiene  
Styrene (ABS)



**Dimensions (mm):**  
External L 181 x W 181 x H 67



**Tests and labelling** CE

Possible detections

**Acids**  
For the detection  
of acid vapours



## 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.





320

**Voltage/frequency**  
100–240 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  $\beta$  (Beta) radiation emitted by radioactive isotopes such as: T(3H), 14C, 32P

**Filtration module**  
Injected polypropylene

 **Tests and labelling** 

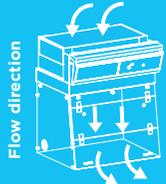


**Dimensions (mm):**  
**Internal** L 785 x D 583 x H 566  
**External** L 809 x D 615 x H 715

Possible uses

UV decontamination





**321**

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate\***

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

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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



Ultra clean air



UV decontamination



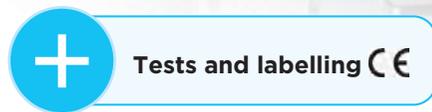
Possible uses



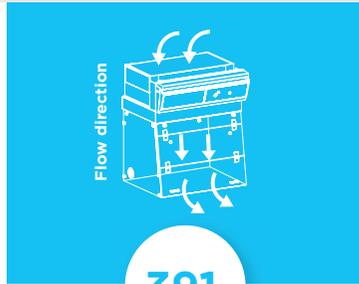
**Dimensions (mm):**

**Internal** L 785 x D 583 x H 695

**External** L 809 x D 615 x H 967/1066\*



\*Min/max height depending on the filtration column



**391**

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate\***

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

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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** CE



**Dimensions (mm):**

**Internal** L 969 x D 583 x H 661

**External** L 1005 x D 615 x H 967/1066\*

Ultra clean air



UV decontamination



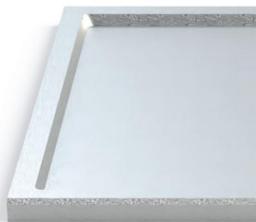
Possible uses

\*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

The closure sensor informs the user whether the front of the device is properly closed. If the front panel is not completely closed, the UV lamp will not be triggered.

### Work bench



#### Mobicap

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

Only available for models 320-321-391



#### 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.) as well as an electrical socket.

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.



#### Benchcap

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



#### Shelf option

Internal, semi-removeable, metal **Benchcap** shelf.

## 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

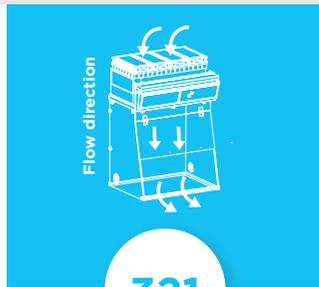
**Connect to the eGuard interface** to control and monitor your protection settings remotely.

#### Monitoring system

Continuous air flow monitoring.

#### Work surface

**Inox work surface**  
 Significant chemical and mechanical resistance. Rounded edges to facilitate cleaning. Integrated retention tray.



321

**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate\***

320 m<sup>3</sup>/h or 150 m<sup>3</sup>/h

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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



**Tests and labelling** CE



**Dimensions (mm):**

**Internal** L 764 x D 583 x H 830

**External** L 800 x D 615 x H 1106/1292\*\*

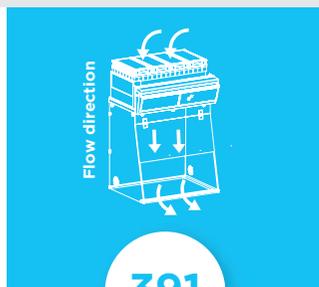
Possible uses

Ultra clean air



\*According to the configuration of the filtration column

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



**Number of filtration columns**

1

**Number of fans**

1

**Air flow rate\***

345 m<sup>3</sup>/h or 150 m<sup>3</sup>/h

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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



**Tests and labelling** 



**Dimensions (mm):**

**Internal** L 969 x D 583 x H 830

**External** L 1005 x D 615 x H 1106/1292\*\*

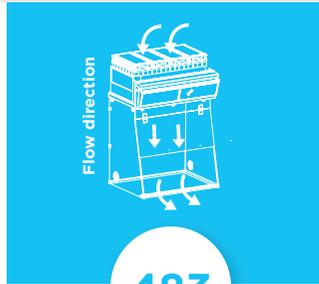
Possible uses

Ultra clean air



\*According to the configuration of the filtration column

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



**Number of filtration columns**

3

**Number of fans**

3

**Air flow rate\***

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

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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



**Tests and labelling** CE



**Dimensions (mm):**

**Internal** L 1172 x D 653x H 1039

**External** L 1298 x D 750 x H 1332/1518\*\*

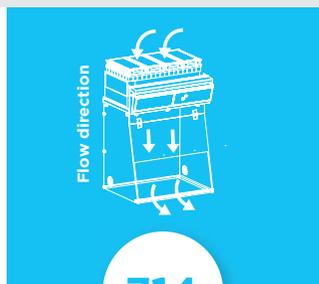
Possible uses

Ultra clean air



\*According to the configuration of the filtration column

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



**714**

**Number of filtration columns**

4

**Number of fans**

4

**Air flow rate\***

1040 m<sup>3</sup>/h or 690 m<sup>3</sup>/h

**Air face velocity\***

0.35 m/s

**Voltage/frequency**

100–240 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



**Tests and labelling** 



**Dimensions (mm):**

**Internal** L 1697 x D 653 x H 1039

**External** L 1819 x D 750 x H 1332/1518\*\*

Possible uses

Ultra clean air



\*According to the configuration of the filtration column

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

## 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 self-locking. Allows the device to be moved with complete safety.

Only available for models 321-391



#### 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.) as well as an electrical socket.

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

### Type of opening



#### Smart Flow 321-391 fume hoods

##### Oblong opening

The ergonomic and secure opening conforms with the standard.



#### Benchcap

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



#### Shelf option

Internal, semi-removeable, metal **Benchcap** shelf.



#### Smart Flow 483-714 fume hoods

##### Sequential opening

The ergonomic and secure 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	+++	+++	+++
Acids	+++	-	++
Excluding hydrofluoric acid	x	x	-
Sodium hypochlorite (bleach)	+++	x	+
Impact resistant	+	++	+++
Scratch resistant	+++	-	-
Load capacity	50 kg/m <sup>2</sup>	110 kg/m <sup>2</sup>	110 kg/m <sup>2</sup>
Load resistant	-	+	++
Ease of cleaning	++	+++	+++
Stability	+	-	++
Equipment available	N/A	N/A	Sinks, taps (contact us for more information)

## 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.

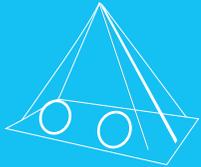
### Filling valve

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.





## Pyramid

### Enclosure and base

Flexible PVC, assembled by high-frequency 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



### Possible applications:

- Handling potentially contaminated objects
- Taking samples to different sites
- Working in an inert atmosphere
- Revealing fingerprints
- Protecting people from splashes during biopsies
- Keeping handlings free of dust and humidity



### Dimensions (mm):

External L 860 x D 560 x H 725

## USAGE EXAMPLES

For the Erlab glove bag.



Handling on  
a car



Handling on  
a wall



Handling on  
a work surface



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

## 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.





## eValiQuest

Chemical hazard assessment service.

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](http://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

#### 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

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.



# ecoPROTECT®

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

## Disposal of used filters

According to the environmental protection regulations, please entrust the disposal of your used filters to a certified hazardous waste disposal company. This responsible action is essential to minimize environmental pollution and adhere to legal requirements.

Erlab is available to offer consulting assistance in identifying the right hazardous waste disposal company.



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.



## Erlab Asia Headquarters

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