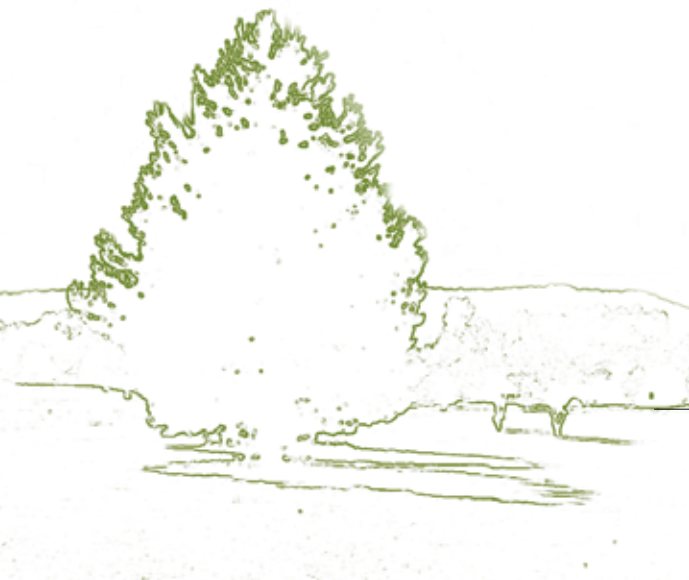


Ductless filtering fume hoods and vented storage cabinets

Ductless fume hoods - Weighing stations - Vented storage cabinets - Stand alone filtration system for safety cabinets - PCR workstations - HEPA filtered enclosures - Portable Glove box

Designed to protect users,
the environment and to save energy



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The Erlab® Group, a worldwide leader

Recognized leader in filtration technology for the protection of laboratory personnel since 1968.

Since the very beginning, we have focused all of our efforts on researching, designing, developing, and manufacturing sustainable safety solutions.

Our main objective is to offer our users the most high-performance solutions in terms of protection against chemical inhalation risks in the laboratory.

Our worldwide presence, our production capacities, and our strong research & development activities allow us to offer advanced filtration technology solutions to laboratories in chemical, pharmaceutical, cosmetic, agro-food, hospital, and academic markets.

« The AFNOR NF X 15-211: 2009 standard attests the high performance of our products. »

More info p.32

For us, compliance with standards is fundamental. Based on scientific criteria, the AFNOR NF X 15-211: 2009 standard attests the high performance of our products, which ensure your day-to-day safety at work.

Our expert filtered air recirculation systems allow laboratories to make environment a top priority. All of our solutions have been designed to limit laboratory's impact on the environment and to support one of the most important objectives in today's world: energy savings.



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



America : Erlab, Inc. (USA)



Asia : Erlab Ltd (China)



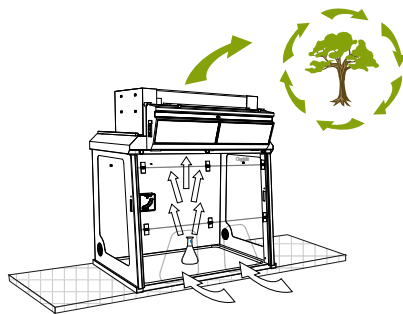
A state-of-the art R&D laboratory

Strengths

Captair® solutions are designed to protect laboratory personnel when working with chemicals. Based on filtration principle, these products offer a high degree of protection against inhalation risks coming from harmful molecules and particles emitted at workstations. The containment and filtration efficiency of these products, as demonstrated by their compliance with the AFNOR NF X 15-211: 2009 standard, make this protective equipment a reliable, flexible, economical, and environmentally-friendly solution.

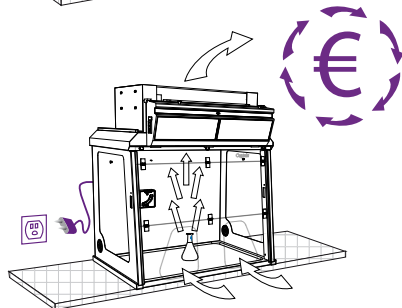
Protect the environment

Free of any ducted airflow system, Captair® solutions eliminate direct emission of pollutants into the atmosphere and help to protect the environment. They also avoid pollution generated by the energy needed to run the airflow systems of traditional ducted fume hoods.



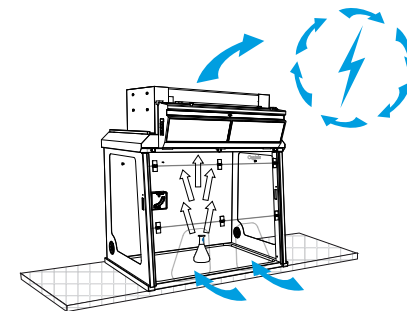
Eliminate installation costs

Implementing a Captair® solution is simple and quick. It does not involve the installation of a ventilation system for air supply and extraction as required by ducted systems. A single electrical outlet is all you need to run the Captair® Flex® fume hood. It can be installed at any time, without complex preparation.



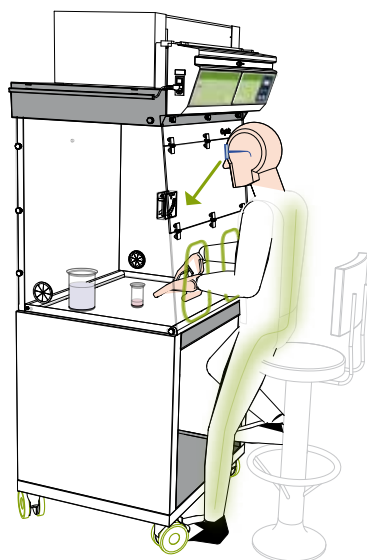
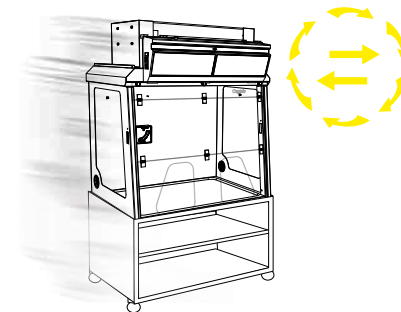
Save on energy costs

The air balance necessary to run ducted systems results in high energy consumption. A Captair® solution eliminates the energy costs related to systems extracting and supplying conditioned air. It is able to keep operating costs low, even when the cost related to filter replacement is taken into account.



Easily transportable and instantly ready to use

Captair® solutions may be moved from one location to another within the same laboratory according to protection needs. They can be easily relocated without affecting the equipment's air balance.



Quality design

With over 90,000 Captair® units in operation, our internationally-recognized experience allows our developers to design solutions that optimize the workstation and handling of chemicals. This experience enables us to offer product lines that provide security, functionality, and comfort in terms of both use and maintenance.

Enclosure dimensions

- Enclosure width: from 80 cm to 180 cm
- Large instruments can easily be placed inside
- Easy to integrate with current laboratory fixtures

Visibility

- The optical-quality synthetic glass panel provides optimal visibility of the activities performed within
- Bright lighting

Openings on the front

- Ample room for movement within the enclosure
- Central protective screen to prevent any risk of chemical splashes

Installation

- Ready to install, quick assembly
- Very few tools required
- Simple maintenance operations

Working posture

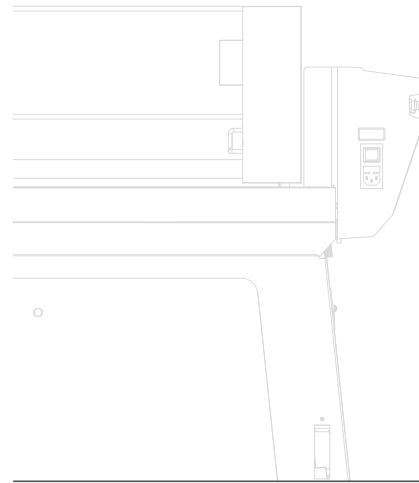
- Activities can be performed either seated or standing, without fatigue
- Rounded-edge work surfaces: provide an armrest for the forearms
- Slanted front comfortable working posture

Quiet operation

Safety, environmental protection, and energy savings within your laboratory

The filtration technology used in the design of Captair® fume hoods makes it possible to protect laboratory workers in accordance with the AFNOR NF X 15-211: 2009 standard criteria, to decrease the laboratory's environmental footprint, and to reduce installation and operating costs.

An independent study* showed that extraction fume hoods represent a significant share of a laboratory's energy consumption. Every extraction hood contributes to the large amount of energy used by laboratories-3.5 times greater than what used by an average-sized house. All the advantages offered by Captair® fume hoods help to reduce your environmental impact and your running costs.

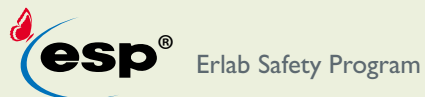


Calculate and compare the actual operating cost of a Captair® ductless fume hood.

	For 1 Captair® device
Structural work required	0 €
Makeup air & air conditioning	0 €
Annual energy cost*	between 5 and 30 €
Annual filter replacement cost	between 250 and 1000 €
Annual maintenance cost	between 150 and 220 €
Total average annual operating cost	between 405 and 1250 €

* Estimate based on: the cost of electricity for industrial use in France: 0.055 euros/kW - 8h/d for 218 days per year.

The ESP® program



Erlab's commitment
to your safety

Our laboratory analyzes interactions between molecules and validates the right filtration technology for your applications.

Based on this scientific analysis, our laboratory will recommend the filtration configuration, and the type of enclosure needed to ensure your safety.

After the device has been set up, your ESP® specialist provides long-term monitoring and modification services for your Captair® system based on the applications carried out within the hood.



The **ValiQuest®** service :
validates the ductless fume hood
best suited to your application

With the assistance of an ESP® agent, you will fill out an informational questionnaire in order to provide a detailed description of the chemical applications that you plan to carry out. Specialists in our laboratory will determine the right type of fume hood and filtration technology corresponding to your manipulations within 48 hours. We are committed to ensure your safety by certifying the feasibility of your applications.

The **ValiPass®** service :
certifies and confirms the appropriate use
of the fume hood at installation

When the fume hood is installed, a certificate of use will be provided, indicating the specific chemicals that may be used, the type of filter, as well as filter life time. Your fume hood has been validated with these criteria in mind. This certificate serves to constantly remind user and/or the safety manager details regarding device's appropriate use.

The **ValiGuard®** service :
continuous monitoring of your ductless fume hood

Periodically, an ESP® agent will contact you to ensure that your applications have not changed and that the filter is still effective. The agent will guide you step by step through the tests for filter saturation as well as through filter replacement procedure. If your applications have changed, the E.S.P® agent will ask you to fill out a new questionnaire (see step 1). After review, you will be sent a new certificate of use stating the chemicals analysed in order to ensure that these chemicals are always handled under optimal safety conditions.

Contact your ESP® specialist at any time to configure YOUR Captair® safety solution with his or her assistance.

Online service: www.captair.com

Filtration technologies

The airborne pollutants in your laboratory

Present in the form of gas and/or particles, chemicals present an inhalation risk that could affect health of laboratory personnel. Health authorities have established concentration limits that may not be exceeded under any circumstances. These limits are defined by Occupational Exposure Limits (WEL/TLV), expressed in parts per million

(PPM).

These dangerous, ever-present pollutants, generated by day-to-day handling of chemicals, require all laboratories to adopt preventative and protective measures in accordance with regulations in effect.

Drawing on over 40 years of filtration technology

experience, Erlab has developed The Flex® technology, which, through the combination of molecular and HEPA particle filtration technology, provides a comprehensive protection solution for most common applications seen across the various laboratory disciplines, in every environment and industry.

Molecular filtration technology: super-activated carbon

Activated carbon has been used for over a century because of its exceptional adsorption properties. Today, different varieties of activated carbon are used in various applications, such as water treatment, VOC treatment, solvent collection, chemical catalysis, etc.

Each of these applications requires a different type of activated carbon having specific, customized physico-chemical properties.

For over 40 years, our very active R&D division has been developing activated carbon-based filtration technologies that make it possible to adsorb airborne chemical pollutants in a stable, irreversible manner.

We offer a unique line of activated carbon solutions, sold as filtration cartridges, designed to protect laboratory personnel from inhalation risks.

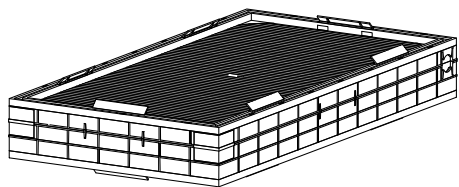
A very strict set of specifications, developed by Erlab and based on compliance with international standards, allows us to select raw materials and to create technologies with the right porosity. Inspired by military-type gas masks, these technologies are able to adsorb a very wide range of molecules with no risk of desorption under normal operating conditions.

Our experience, based on over 30 years of testing, laid out in our Chemical Listing, is a testament to our in-depth filtration expertise.

The development of our filtration technologies also involves an environmental dimension. For instance, we decided many years ago to avoid using impregnation agents that are harmful to environment.

Our filters are subject to strict testing, as set forth in the AFNOR NF X 15-211:2009 standard, the referent standard in the field of ductless fume hoods. The effectiveness of these solutions, as demonstrated by the results obtained, serves to guarantee users safety.

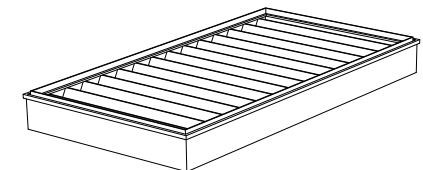
Regarding quality, each of our filters is delivered with a quality certificate that traces its entire production cycle.



Types of carbon filters	
GF4 AS	For organic vapors
GF4 BE +	Polyvalent for acid + organic vapors
GF4 F	For formaldehyde vapors
GF4 K	For ammonia vapors

Particle filtration technology: HEPA H14

This filtration technology traps particles larger than 0.1 µm with 99.995% efficiency, according to the MPPS method set forth in the EN 1822-1 standard.



Flex[®] technology

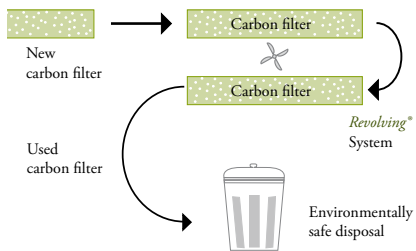
Patent pending



Modular filtration column

The fusion of molecular and particle filtration technologies makes it possible to configure a single device to meet all laboratory protection needs. This flexibility was made possible through the creation of stackable, one-size-fits-all, filtration cartridges—an innovation that is key to the new Captair[®] Flex[®] line. The modular filtration column adapts itself to the protection needs and specifications of the laboratory. The different models in the new line of Captair[®] Flex[®] ductless fume hoods can thus be equipped with 1 to 4 filtration columns, offering very high retention capacities. This innovation, developed by Erlab's R&D laboratory, offers unprecedented flexibility, adaptability, and savings. A single device can be quickly reconfigured and easily used for other applications.

The patented Revolving Filter system



When the main filter is saturated, the molecules are automatically directed to a back-up filter. The back-up filter replaces the main filter when the main filter has reached its maximum saturation point. A new filter is then installed in place of the back-up filter.

The revolving system advantages:

- Significant optimization of the main filter life time;
- Substantial savings in terms of renewal costs.

Products handled	liquids	powders	liquids & powders	cleanroom
Applications	For diluting, proportioning, extracting, decanting, etc.	For sifting, grinding, weighing, formulating, compressing, etc.	For dissolving, filtering, extracting, etc.	For clean rooms rated up to ISO class 7.
Customized filtration column	<p>1C</p> <p>Class 2 according to the NF X 15-211: 2009 standard</p>	<p>1P</p> <p>Class 2 according to the NF X 15-211: 2009 standard</p>	<p>1P 1C</p> <p>Class 2 according to the NF X 15-211: 2009 standard</p>	<p>1C 1P</p> <p>Class 2 according to the NF X 15-211: 2009 standard</p>
Customized filtration column	<p>2C</p> <p>Class 1 according to the NF X 15-211: 2009 standard</p> <p>Class I = Maximum protection</p>	<p>1P 2C</p> <p>Class 1 according to the NF X 15-211: 2009 standard</p> <p>Class I = Maximum protection</p>	<p>2C 1P</p> <p>Class 1 according to the NF X 15-211: 2009 standard</p> <p>Class I = Maximum protection</p>	

Class I device = Maximum protection guaranteed by the AFNOR NF X 15-211 I: 2009 standard!

A filtration column configured in class I (1 main filtration level + 1 back-up filtration level) prevents chemicals from being released if the main filter reaches its saturation point.



captair® flex®

Ductless mobile fume hoods with modular filtration column

Designed to protect users during applications emitting vapors and/or chemical particles, the Captair® Flex® line offers a level of performance that ensures your safety while offering an environmentally-friendly alternative to traditional systems.

Based on the Flex® technology -a flexible, adaptable modular filtration column- this line of chemical protection enclosures offers a wide range of possibilities and allows you to carry out a variety of applications in your laboratory.

The high containment and filtration performance of this technology offer users a high degree of protection, in accordance with the AFNOR NF X 15-211: 2009 standard, class 1 and class 2.

This technology is suited for many different industries, such as:
**chemistry, pharmaceuticals, cosmetics, biochemistry,
academics, petrochemistry, forensics, manufacturing,
agro-food, hospitals, etc.**

Modular filtration technology
customized for your applications

Air face velocity
monitoring system

Electrical and fluid lines
can be run into the enclosure

Vibration-absorbent
work surface, high chemical
and mechanical resistance



Automatic filter
saturation detection

Bright, energy-efficient lighting

Slanted front

Ergonomic openings

Flex[®] Technology



Commissioning, training, and maintenance offered by our Asura department and its network of licensed technicians.



M 321



Tested according to the ASHRAE 110: 1995 standard & compliant with the BS7989 standard Tests and markings **CE**

Dimensions (mm) M 321 & Midcap

	L	D	H mini/max
Interior	764	543	866
Exterior	800	630	1160/1345

Technical specifications

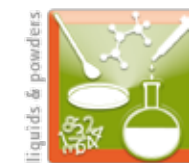
	M 321
Number of filtration columns	1
Number of fans (IP44)	1
Processed air flow	230 m ³ /h
Air velocity at openings (in on-position)	0,4 to 0,6 m/s
Voltage/frequency	90 - 264 V / 50-60 Hz

	M 321
Including electricity for the lights	70 Watts
Type of opening	Oblong
Structure	Anti-corrosion steel coated with 100% polyester
Panels	8 mm synthetic glass
Filtration module	Polypropylene

Flex® Technology

M 39I

M 48I



Except M 48I



Tested according to the ASHRAE 110: 1995 standard & compliant with the BS7989 standard Tests and markings **CE**

Dimensions (mm)

	M 39I			M 48I		
	L	D	H min x max	L	D	H min/max
Interior	965	522	860	1240	522	860
Exterior	1000	630	1160/1345	1275	630	1160/1345

Technical specifications

	M 39I	M 48I
Number of filtration columns	1	
Number of fans (IP44)	1	
Processed air flow		230 m ³ /h
Air velocity at openings (in on-position)		0,4 to 0,6 m/s
Voltage/frequency		90 - 264 V / 50-60 Hz

	M 39I	M 48I
Including electricity for the lights		70 Watts
Type of opening		Oblong
Structure	Anti-corrosion steel coated with 100% polyester	
Panels	6 mm synthetic glass	
Filtration module	Polypropylene	

Flex[®] Technology



XLS 392



XLS 483



Tested according to the
ASHRAE 110: 1995 standard
& compliant with the BS7989 standard
Tests and markings **CE**

Dimensions (mm)

	XLS 392			XLS 483		
	L	D	H mini/max	L	D	H mini/max
Interior	965	695	1040	1173	695	1040
Exterior	1000	800	1315/1495	1275	800	1315/1495

Technical specifications

	XLS 392	XLS 483
Number of filtration columns	2	3
Number of fans (IP44)	2	3
Processed air flow	460 m ³ /h	690 m ³ /h
Air velocity at openings (in on-position)	0,4 to 0,6 m/s	
Voltage/frequency	90 - 264V / 50-60 Hz	

XLS 392 XLS 483

Including electricity for the lights	121 Watts	191 Watts
Type of opening	Total	
Structure	Anti-corrosion steel coated with 100% polyester	
Panels	6 mm synthetic glass	
Filtration module	Polypropylene	

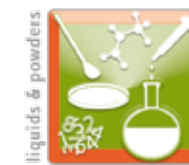
XLS 633



XLS 714



Flex[®] Technology



Except XLS 633



Tested according to the ASHRAE 110: 1995 standard & compliant with the BS7989 standard Tests and markings **CE**

Dimensions (mm)

	XLS 633			XLS 714		
	L	D	H mini/max	L	D	H mini/max
Interior	1566	695	1040	1765	695	1040
Exterior	1600	800	1315/1495	1800	800	1315/1495

Technical specifications

	XLS 633	XLS 714
Number of filtration columns	3	4
Number of fans (IP44)	3	4
Processed air flow	690 m ³ /h	920 m ³ /h
Air velocity at openings (in on-position)	0,4 to 0,6 m/s	
Voltage/frequency	90 - 264 V / 50-60 Hz	

XLS 633 XLS 714

Including electricity for the lights	191 Watts	261 Watts
Type of opening	Trapezoid	Total
Structure	Anti-corrosion steel coated with 100% polyester	
Panels	6 mm synthetic glass	
Filtration module	Polypropylene	

Control panel

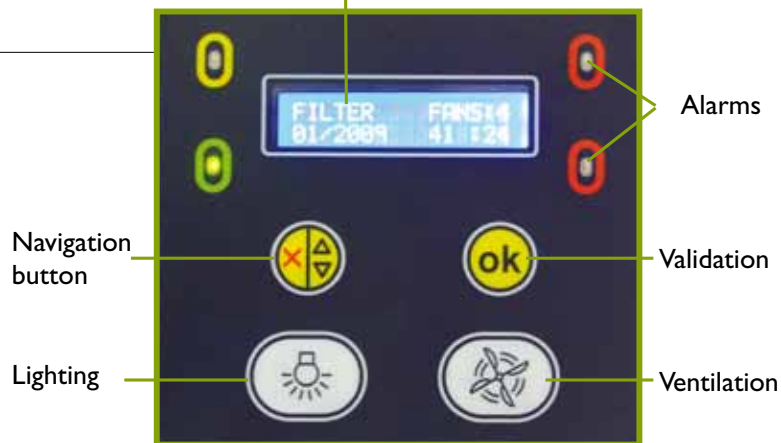
Flow monitor

This device allows for continuous monitoring of the ventilation flow rate and alerts the user via visible and audible alarm in the event of a ventilation system failure.

Adjustable timer

This timer records the number of hours that the device has been in operation and, every 60 hours, notifies the user the need to test the saturation level of the molecular filter. (In accordance with the requirements of the AFNOR NF X 15-211: 2009 standard).

Digital display for optimal data read-out



Sampling probe



This probe allows the user to sample the air within the detection chamber of the filtration module in order to evaluate the saturation level of the molecular filter, using color comparison reagent tubes (not included).

(Equipment not included on devices set with the Molecode S automatic saturation detection sensor)

Anemometer



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

Lighting



Interior Lighting
18 watts - 500 lux - IP67.

Compact fluorescent tube lights. One to three tubes, depending on the model.

Energy Ports



Located on the enclosure sides, these ports allow electrical cables and/or fluid lines to enter the enclosure without incommoding the user.

Chemical Listing

A guide of Erlab-approved chemicals

This guide includes a comprehensive list of chemicals that Erlab certifies as tested and authorized for use within the hood, under the conditions set forth by the AFNOR NF X 15-211: 2009 standard.

The guide includes almost 700 chemicals and lists the following for each of these chemicals: name of the chemical, its formula, its CAS number, its boiling point, its molecular mass, its saturation vapor pressure, the filter designed to trap this chemical and the retention capacity of this filter, the type of filter saturation detection system, the maximum mass of the chemical that may be introduced within the enclosure, and the name of the testing laboratory that performed the test related to this chemical handling.

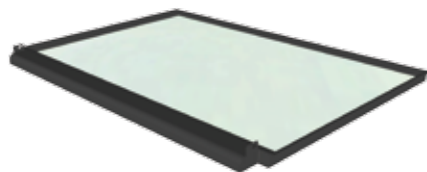


The product of 40 years of R&D!

Work surfaces

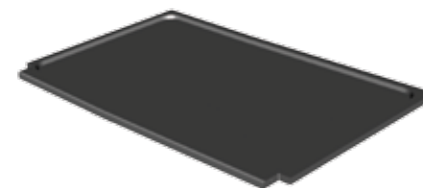
Glass work surface

- Tempered glass work surface with framing
- Ergonomic arm rest to work comfortably.



Phenolic resin work surface

- Work surface with built-in spill tray, made of phenolic resin, with an ergonomic arm rest to work comfortably.
- High chemical and mechanical resistance.
- Ideal for precision weighing operations.



Work benches and shelves

Mobicap™*

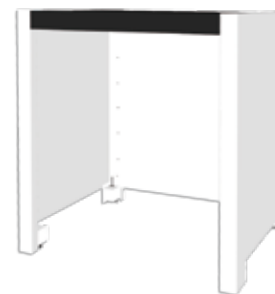
- Metal rolling cart, equipped with 4 wheels (2 locking wheels).
- Allows the device to be moved safely.



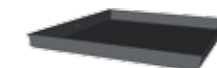
*Only available for the Captair® Flex® M 321 and Captair® Flex® M 391 models

Benchcap™

- Fixed metal work bench.
- Equipped with 4 height adjustment jacks.



Interior metal sliding shelf for Mobicap™ and Benchcap™.



Molecode™ S



Large-spectrum filter saturation alarm.

(Equipment required by class 1 of the AFNOR NF X 15-211:2009 standard)

- 1 sensor is located in the detection chamber and automatically detects when the filter has become saturated by solvents.

- 1 sensor is in contact with the laboratory environment and indicates eventual air pollution with solvents

Particle pre-filter

Eliminates particles > 0.3 µm to optimize the performance of the HEPA H14 filter.



Transparent back panel

- Made of synthetic glass.
- Offers 360° visibility of handlings performed into the enclosure
- Optimizes lighting conditions.



Access door

- Made of steel.
 - Located on the back side of the enclosure, this door provides easy access for large, heavy instruments.
 - Ideal for maintenance operations.
- (Except on the Captair® Flex® M 321 model)





Secure weighing stations

Designed to ensure safety during precision weighing tasks. Using protective airflow, Captair® Flex® secure weighing stations provide a stable base for precision balances while offering a high level of containment and filtration performance that guarantee optimal protection for users (devices comply with the AFNOR NF X 15-211: 2009 standard, class 1 and 2).

Precise results

Captair® Flex® weighing stations are designed to allow weights to be measured with a precision up to 10^{-6} g.

 **captair flex**
Secure weighing stations



Modular filtration technology adapted to liquids and/or powders weighing

Automatic filter saturation detection

Bright, energy-efficient lighting

Ergonomically-customized for weighing activities

Vibration-absorbent work surface to ensure balance stability

Double-bag waste port with protective housing

Workbench equipped with vibration-absorbent jacks





For the weighing of liquids and powders, either individually or combined

M 32I



M 39I



M 48I



XLS 392



Commissioning, training, and maintenance offered by our Asura department and its network of licensed technicians.



Tested according to the ASHRAE 110: 1995 standard & compliant with the BS7989 standard Tests and markings **CE**

Dimensions (mm)

	M 32I			M 39I			M 48I			XLS 392		
	L	D	H mini/max	L	D	H mini/max	L	D	H mini/max	L	D	H mini/max
Interior	764	543	866	965	522	860	1240	522	860	965	695	1040
Exterior	800	630	1160/1345	1000	630	1160/1345	1275	630	1160/1345	1000	800	1315/1495

* See pages 10-13 for additional technical specifications



Interior lighting

- IP67 - Dust and vapor-tight.
- Even, bright lighting of the work surface.
- Energy-efficient.



Work surface made of solid phenolic resin

- Non-conductive material, very high mechanical and chemical resistance.
- Built-in spill tray.
- Guarantees precise, reproducible weight measures.
- Prevents static charges caused by items within the enclosure.
- Easy to clean.



Waste port (complementary equipment)

- Internal and external access secured by a protective air flow.
- Double-bag mounting system that prevents any waste from being released outside the enclosure.
- External housing to prevent bags from pulling free or tearing.



Benchcap™

- Workbench that transforms the weighing unit into a true independent work station.
- Equipped with 4 vibration-absorbent jacks used to level the station.





Vented filtering storage cabinets

Designed to store the various reagents used in the laboratory, Captair® Store™ vented filtering storage cabinets reduce the inhalation risks associated with the concentration of vapors into the room environment.

Equipped with class-2 molecular filtration technology in accordance with the AFNOR NF X 15-211:2009 standard, these cabinets retain the toxic, odorous vapors emitted by chemical flasks and bottles.

Since they are ductless, Captair® Store™ cabinets do not release any pollutants into the atmosphere and may be installed near the work station. The recirculation of filtered air also allows them to purify the laboratory ambient air.

Designed for all storage requirements, all areas, and all different reagent types, Captair® Store™ cabinets are the right solution for any laboratory where many flasks and bottles pollute the room environment and take too much space.

Modular filtration technology
suitable for storage

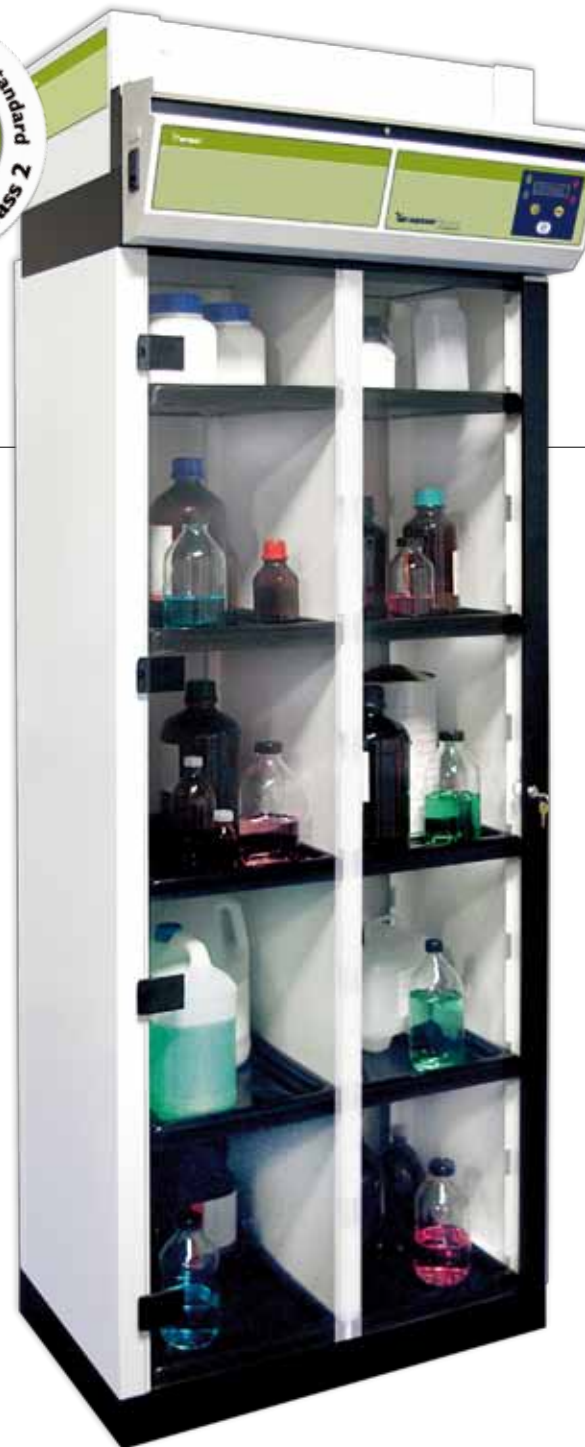
Very quiet ventilation system

Elimination of harmful, odorous vapors

High corrosion-resistance



Storage capacity from 10 to 300 liters



No ducted airflow system needed

Purification of the ambient
air into the laboratory

Lockable storage
solution

Removable shelves
with built in spill tray
(around 4L)

Storage of compatible and/or
incompatible chemicals

Commissioning, training, and maintenance offered by our Asura department and its network of licensed technicians.



Shelf 812

Storage capacity: 10 bottles (1 liter) containing compatible chemicals.



Ministore 822 small storage cabinet

Storage capacity: 48 bottles (1 liter) containing compatible and/or incompatible chemicals.



+ Tests and markings **CE**

Dimensions (mm)	Shelf 812		
	L	D	H
Interior	783	188	348
Exterior	821	285	719
Option 812B		275	929



To be placed on a work surface
No.: 812 A



On legs, to be placed on a work surface
No.: 812 B



To be wall-mounted
No.: 812 C

Dimensions (mm)	Ministore 822		
	L	D	H
Interior	753	322	519
Exterior	819	354	730
Option 822B		435	911
Option 822C		372	705



To be placed on a work surface
No.: 822 A



On legs, to be placed on a work surface
No.: 822 B



To be wall-mounted
No.: 822 C



To be placed underbench
No.: 822 D

Technical specifications

Filter type	AS (organic vapors) BE (organic chemicals and acids)
Fan	Quiet ventilation fan

Processed air flow	75 m3/h
Voltage/frequency	230 volts / 50 hertz
Electrical power	20 Watts

Retention tray volume	812 : 2 liters - 822 : 2x2 liters (with absorbent mat)
Structure	Anti-corrosion steel coated with 100% polyester
Number of shelves	Ministore 822 : 8 shelves adjustable in height and 2 fixed.

832

Storage capacity: 150 bottles (1 liter) containing compatible and/or incompatible chemicals.



834

Storage capacity: 150 bottles (1 liter) containing compatible and/or incompatible chemicals.



1634

Storage capacity: 300 bottles (1 liter) containing compatible and/or incompatible chemicals.



Flex® Technology


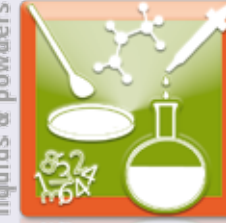
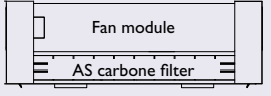
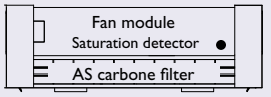
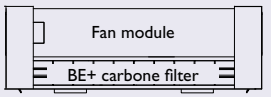
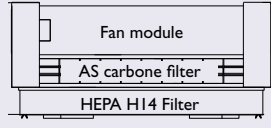
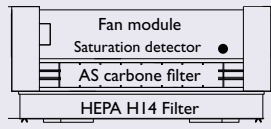
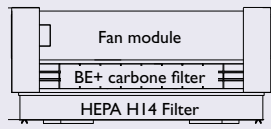


Dimensions (mm)	L	D	H
832	800	510	2100
834	800	605	2275 mini 2355 maxi
1634	1600	605	2300 mini 2390 maxi

Technical specifications	832	834	1634
Filter type	AS BE F K	AS (organic vapors) BE (organic chemicals and acids) HP (HEPA H 14) F (For formaldehyde vapors) K (For ammonia vapors)	
Number of fans	1	1	1
Processed air flow	75 m³/h	> 75 m³/h	
Voltage / Frequency	230 V / 50 Hz	90 - 264 V / 50 Hz	

	832	834	1634
Electrical power	20 Watts	21 - 34 Watts	
Amperage absorbed	0,1 amp.	0,8 amp.	1,3 amp.
Metallic parts	Anti-corrosion steel coated with 100% polyester		
Door	Synthetic glass 8 mm		
Filtration module	X	Injected polypropylene	
Nombre of Shelves	10	10	20

Flex® filtration technology
For 834 and 1634 storage cabinets

Chemicals stored	liquids		Liquids
	liquids & powders		Liquids & powders
Filtration column configurations	Filtre carbone AS	Solvents pack	
		Solvents detection Pack	
		Acids/ Solvents Pack	
	Filtre carbone BE+	Solvents/ Powders Pack	
		Solvents/ Powders detection Pack	
		Acids/ Solvents/ Powders Pack	

Standard Equipments



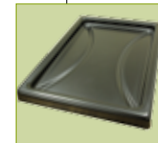
Flow monitor (Except 832)

Permanent ventilation control device according to EN 14175-2:2003 standard



Sampling port (Except 832)

For filter saturation detection (N/A if Molecode S installed)



Shelves

832 - 834 : 8 shelves adjustable in height and 2 fixed.
1634 : 16 shelves adjustable in height and 4 fixed. Spill tray included.

Lock

For a securised access to chemicals

Chemical Listing

List of approved chemicals

Complementary equipments

Molecode S* (Except 832)

Automatic alarm to detect filter saturation by solvents according to NF X 15 211 : 2009 standard

Particular Pre-filter (Except 832)

Protect HEPA and molecular filters from dust contained into the laboratory environment

Double door

For a small space. Radius door opening 34 cm

Types of filters

AS	For storage with a predominance of organic vapors
BE+	For storage with a predominance of organic vapors and acids
HP	HEPA H14 filter for powders storage
F	For formaldehyde vapors
K	For ammonia vapors

ChemTrap™ allows laboratories equipped with safety cabinet to also benefit from a protection against chemical inhalation risks.

ChemTrap™ advantages:

- End-users protection thanks to chemical vapors elimination by filtration.
- Adaptable to a wide range of under bench and vertical safety cabinets.
- Contributes to renew and purify the air into a room.

2 specific columns:

H 402

For vertical safety cabinets

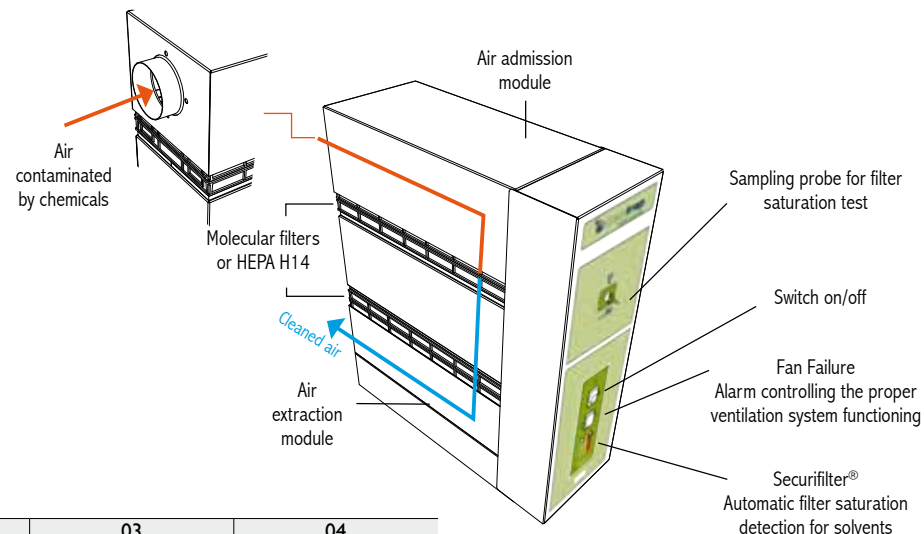


V 201

For under bench safety cabinets



Working principle:



Versions offered

01	02	03	04
Sampling probe	Sampling probe + Fan failure	Sampling probe + Fan failure + Securifilter	Sampling probe + Securifilter

Technical data

	H 402	V 201
Types of filters	AS (For storage with organic vapors mainly) BE (For storage with organic vapors and acids mainly) HP (HEPA H14 for powders storing)	
Number of fans		1
Processed air flow	75 m³/h	> 50 m³/h
Voltage	230 V / 50 Hz	

	H 402	V 201
Electric power	19 Watts	
Absorbed intensity	0,1 amp.	
Flexible duct connection	1 meter (Ø 80 mm)	
Flexible connecting flange	Ø 75 to 110 mm	
Metallic parts	Anti-corrosion steel coated with 100% polyester	

Advantages:

- Allows to get safety cabinets autonomus
- Fast and easy installation
- Eliminates connection to the main extraction system
- Compatible with a wide majority of safety cabinets
- Automatic detection of filter saturation

Commissioning, training, and maintenance offered by our Asura department and its network of licensed technicians.



Dimensions (mm)	W	D	H
H 402	390	570	267
V 201	200	537	587

*Safety cabinet not supplied



PCR workstations

Designed for gene amplification applications, Captair® Bio PCR workstations allow users to save precious time by offering a contamination-free work environment needed to duplicate samples.

Equipped with a powerful UV-ray system and a vertical laminar flow, these work stations provide a high degree of protection for applications performed within.



Radiation time adjustment system

UV decontamination

HEPA H14 filtration (RNA/DNA model)

Glass side and front panels in acrylic glass protecting users against UV radiations

Automatic interruption of the UV lamp when the door gets opened

Complete protection for gene amplification - Save time and your samples

Biocap™ DNA static enclosure



Commissioning, training, and maintenance offered by our Asura department and its network of licensed technicians.

Biocap™ RNA-DNA dynamic enclosure

The ultra-clean air entering the enclosure meets the requirements of ISO class 5 (standard EN ISO 14-644), which corresponds to American class 100 (i.e., less than 100 particles per cubic foot*)

Air quality within the enclosure: ISO 5*



Dimensions (mm)	L	D	H
Interior	601	565	600
Exterior	653	610	730

For applications with a small risk of sample contamination

Technical specifications

Acrylic enclosure	10 mm	Total electrical power	26 Watts
Internal volume of the enclosure	0,2 m ³	Voltage/frequency	230V / 50Hz

Dimensions (mm)	L	D	H
Interior	601	565	600
Exterior	653	610	785

For applications with a high risk of sample contamination

Technical specifications

Acrylic enclosure	10 mm	Processed air flow	175 m ³ /h
Filter type	HEPA H14	Air renewal	90 time/min.
Face velocity	0,53 m/s	Voltage/frequency	230V / 50Hz
Enclosure internal volume	0,2 m ³	Electrical power	73 Watts

*When used in a cleanroom in compliance with ISO 9 / EN 14-644 standard.

Standard equipment

UV lamp	For decontamination within the enclosure.
HEPA H14 filter (Biocap RNA-DNA)	Traps particles larger than 0.1 µm with 99.995% efficiency, according to the MPPS method set forth in standard EN 1822-1.
Timer	To set UV lamp radiation time from 5 to 30 min.
UV cut-off	Automatic interruption of the UV lamp when the door gets opened
Work surface	Made of steel with rounded edges.
Ports	To run electrical and fluid lines into the enclosure.



Timer



Optional equipment

Mobicap™ rolling cart	The Mobicap™ rolling cart is equipped with an adjustable inner shelf, giving the user the space needed to work while seated. The cart is equipped with 4 wheels (2 locking wheels).
Exterior lighting	500 lux, adjustable, allows the application to be properly illuminated. The lighting and ventilation systems shut off automatically if the UV lamp is turned on.

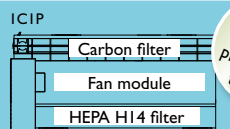
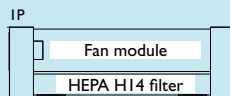
Effective protection for products and/or samples

The Flowcap™ 700 fume hood makes it possible to perform operations in an ultra-clean, dust-free environment.

The housing, which is equipped with a HEPA H14 filter, guarantees 99.995% filtration efficiency for particles larger than 0.1 µm (according to the MPPS method set forth in the EN 1822-1 standard).

The ultra-clean air entering the enclosure meets ISO class 5* (EN ISO 14-644 standard) requirements, which corresponds to American class 100 (i.e., less than 100 particles per cubic foot > 0.5 µm) and to class A and B of the GMP guide published by the European Union for the pharmaceutical industry. Items located into the enclosure are therefore protected from any outside contamination.

Flex® Technology



New!
Chemical protection on top off it

Adding a carbon filter to your vented cabinet allows you to protect its volume from gazes pollutants present in your laboratory environment



Applications :

- Non-pathogenic cell cultures
- In-vitro cultures
- Microbiology (Non-pathogenic)
- Homeopathic preparations in pharmacies,
- Electronics
- Optics, etc.

Laboratories specializing in biology, botany, aeronautiq and aerospace, electronics, pharmaceutical, cosmetics, etc.

Commissioning, training, and maintenance

offered by our Asura department and its network of licensed technicians.



Dimensions (mm)	321			391			483			714		
	L	D	H min/max	L	D	H min x max	L	D	H min x max	L	D	H min/max
Interior	764	549	866	965	522	860	1173	695	1040	1765	695	1040
Exterior	825	630	1160/1345	1000	630	1160/1345	1275	800	1315/1495	1800	800	1315/1495

Characteristics	321	391	483	714
Number of fans (IP44)	1	1	3	4
Filter type	HEPA H14			
Processed air flow	305 m³/h	305 m³/h	445 m³/h	590 m³/h

	321	391	483	714
Voltage/frequency	90 - 264 V / 50-60 Hz			
Electrical power (max)	70 Watts	70 Watts	191 Watts	261 Watts
Amperage absorbed	2,7 amp.		7,35 amp.	10,05 amp.

*When used in a cleanroom in compliance with ISO 9 / EN 14-644 standard.

Standard equipment

Control panel

Flow monitor: Continuous monitoring of the ventilation flow rate and alerts the user via visible and audible alarm in the event of a ventilation system failure.



Anemometer

Continuous monitoring of face velocity



Ports

To run electrical and fluid lines into the enclosure



Interior lighting

IP67 - Dust and vapor-tight. Even, bright lighting of the work surface. Energy-efficient.



Complementary equipment

Work surface in stainless steel 304 L Phenolic resin work surface

High chemical and mechanical resistance. Rounded corners to facilitate cleaning operations. Built in spill tray



- Work surface with built-in spill tray, made of phenolic resin
Easy to clean.



Mobile isolation enclosure

For research done on-field and in the laboratory

- Protection of operators
- Protection of samples
- Ready to use
- Very little space required
- Easy to transport



Optimal air-tightness of the enclosure (tested before being sold: compressed air inflation at 2.5 mm Hg, a certificate of compliance is provided with each enclosure)

Flexible PVC protective package for easy transport.



Applications :

- Opening suspicious packages
- Working in an inert atmosphere (nitrogen, etc.)
- Collecting samples on-location (crime scene evidence, etc.)
- Revealing fingerprints
- Splash protection (biopsies, etc.)
- Performing activities that need to be sheltered from dust or humidity

Rolling cart MOBICAP®

(Uniquement pour 321 et 391)

Metal rolling cart, equipped with 4 wheels (2 locking wheels).

Work bench BENCHCAP®

Fixed metal work bench.

Shelves

Interior metal sliding shelf for Benchcap et Mobicap

Transparent backpanel

Made of synthetic glass. Offers 360° visibility of handlings performed into the enclosure. Optimizes lighting conditions.

Dimensions (mm)	L	D	H
Exterior	860	560	725

Technical specifications

Enclosure and base	Flexible PVC, assembled using high-frequency welded seams
Closure	Double sealing groove
Medical gloves	Made of butyl rubber and PVC sleeves
Valve	Enclosure can be filled with an inert gas (nitrogen).

The AFNOR NF X 15-211: 2009 standard

All Captair® Flex® ductless fume hoods comply with this standard.

Commissioned by the AFNOR, the French Mechanical Standardization Union (UNM), made up of a committee of experts (the French National Scientific Research Institute (INRS), government agencies, professional associations), established the AFNOR NF X 15-211: 2009 standard. This standard applies to filtering fume hoods (also known as ductless fume hoods or ETRAF) designed for research work, analysis, teaching, etc. for all laboratories in which chemicals subject to occupational exposure limits (WEL or TLV-TWA) are handled. This standard sets forth performance and information criteria related to:

- **Filtration efficiency**
- **Containment efficiency**
- **Air face velocity**
- **The submission of a document listing the products that may be handled under the hood.**

Classes established by the standard:

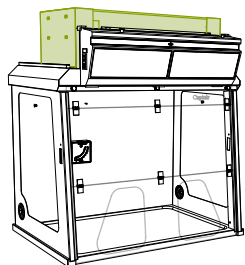
Class 1	Class 2
Ductless fume hood with back-up filter	Ductless fume hood without back-up filter
A main level of filtration and a back-up level of filtration	A single level of filtration

Filtration-based classification:

	Designations according to the NF X 15 211: 2009 standard	Equivalent Erlab® product name
Particle filtration*	Type P	Type P
Vapor filtration**	Type V	Type C
Particle and vapor filtration**	Type PV	Type PC

*A particle filter must be at least type H14 according to standard EN 1822-1.

**Molecular filters must undergo two successive tests using cyclohexane and isopropyl alcohol for filters designed to capture Volatile Organic Compounds (VOC). Another test designed for acid vapor is performed with hydrochloric acid.



Filtration efficiency

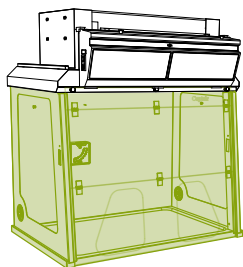
This refers to the filter's ability to trap noxious molecules handled in the enclosure and characterizes the quality of the recirculated air downstream filters.

	Class 1	Class 2
Normal operating phase	Detection phase during which the concentration downstream filters must be less than 1% of the VLEP	
Detection phase	Detection phase during which the concentration downstream filters must be less than 1% of the VLEP and during which the automatic saturation detector should alert the user.	Detection phase during which the concentration downstream filters must be less than 50% of the VLEP
Safety phase	Safety phase during which the concentration downstream filters must be less than 50% of the VLEP and which must not last less than 1/12 the duration of the normal functioning phase.	

The retention capacities recorded during tests performed on our filters demonstrate the technological performance developed by Erlab. These results guarantee users of Captair® Flex® fume hoods very high level of protection.

Sample test performed on a Captair® Flex® XLS 714 fume hood, equipped with class 1 BE+ filters.

Isopropyl alcohol	Cyclohexane	HCL (35%)
2250 gr	3204 gr	7862 gr



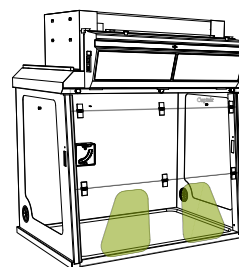
Enclosure containment efficiency

This refers to the fume hood's ability to keep vapors or particles inside the enclosure so that they are not released into the laboratory environment.

To confirm this efficiency, a test is carried out in accordance with the protocol set forth by the standard.

Tracer gas SF₆ (sulfur hexafluoride) is released within the enclosure. A grid made up of sensors is placed in front of the hand holes. Air samples are taken at the grid location. Based on the concentrations of gas emitted and samples taken, which are used to define a user's average exposure to this tracer gas, it is possible to establish the efficiency of the ductless fume hood enclosure.

The containment limit set forth by the AFNOR NF X 15-211:2009 standard requires that the concentration of SF₆ gas must be ≤ 0.1 ppm at the grid detection points.



Air face velocity

This refers to the capacity of the fume hood to create a dynamic barrier between the user and chemicals being handled.

For ductless fume hoods with a fixed face, air face velocity at all openings must be between 0.4 and 0.6 m/s. These fume hoods must also be equipped with a system to continuously monitor the ventilation system, which is itself an indicator of proper containment.



Documentation

Ductless fume hoods must be accompanied by a booklet that includes an exhaustive list of chemicals that the manufacturer has authorized for use within the fume hood in accordance with the conditions set forth by the AFNOR NF X 15-211: 2009 standard. For each of these chemicals, the booklet must list:

- The name of the chemical, its formula, its CAS number, its boiling point, its molecular mass, and its vapor pressure.
- The part number of the appropriate filter and its retention capacity during the normal operation phase.
- The type of saturation detection system corresponding to the filter(s) in question.
- The maximum mass of the chemical that may be introduced in the ductless fume hood.
- The name of the testing laboratory that carried out the type test.

Erlab has created a guide that lists authorized chemical agents and provides an analysis of approximately 700 chemicals, the «CHEMICAL LISTING». This guide is delivered with each device as required by the standard.

International standards

Erlab® products comply with the following standards, thereby guaranteeing that you benefit from complete safety:

France : AFNOR NF X 15-211 : 2009

USA : ANSI/AIHA Z9.5

ASHRAE 110 : 1995

Installation and servicing performed by

Asura®, Erlab's installation and servicing branch

Our specialists team ensures installation, servicing and following up of your ductless fume cupboard, weighing station, vented storage cabinet, PCR work station, etc...

All of your unit technical functionalities are therefore ready to use and performed by professionals guarantying:

- Installation guarantying users safety
- Good practices respect

Asura technicians intervene to control:

- Air face velocity
- Containment
- Filters saturation level

And verify all protection features provided by your unit: ad equation handlings/ filtration typology, filters replacement, cleaning, ...

Asura® control process is based on AFNOR NFX 15 211, EN14775, BS7989 standards mastering.



Asura® is also
a partners network

Asura® also offers is services through a partners network that benefits from ERLAB's expertise

Training

Our experience, recognised in the field, allows Asura® division to offer personalised training sessions to companies integrating a maintenance department or to maintenance providers.

Asura® service availability depends on the country, please contact us for more information



asura[®], replacement filters

The filtration technology developed by our R&D laboratory allows us to offer a wide range of activated carbon filters under the brand Asura[®] filters

As a manufacturer making units compliant with AFNOR NFX 15 211 and BS 7989 standards, we apply the same level of exigency to our Asura[®] filters conception.

Offered at very attractive prices, their performances are suitable with a wide range of ductless fume cabinet brands: Astec, Bigneat, Cruma, Faster, Labcaire, Strola, Airclean, Air Science, Labcaire ... and much more.



Buy your replacement filters on line!

For all brands of ductless fume cupboards and storages cabinets

asurafilters.com
Reduce your filter budget!



With over 1500 references of replacement filters for a ductless fume cupboards and storage cabinets, the new website Asurafilters.com provides a simple, fast, cheap and secured solution to purchase your filters online.

Asurafilters.com offers replacement filters compatible with a wide variety of ductless fume hood and storage cabinet brands such as Captair, Bigneat, Faster, Gelair, Astec ...

Visit us on the web

www.erlab.com

Get to know the erlab group, world leader in laboratory filtration technologies since 1968.



www.greenfumehood.com

Real time communicating fume hoods equipped with the new Neutrodine[®] filtration technology. For multi-disciplinary handlings



www.captair.com

Ductless mobile fume hoods and vented chemical storage cabinets for the total filtration of toxic gases. For a single, dedicated application.



www.asurafilters.com

Buy your replacement filters on line! For all brands of ductless fume cupboards and storages cabinets



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