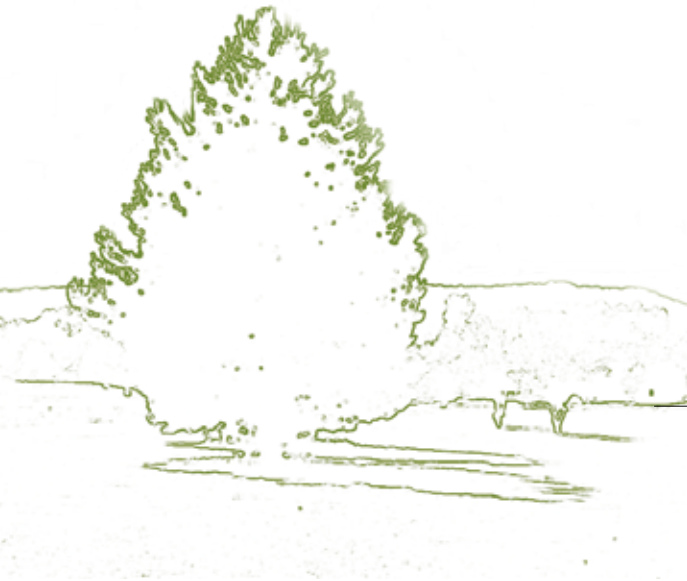


Ductless filtering fume hoods and vented storage cabinets

Ductless fume hoods - Weighing stations - Vented storage cabinets - PCR workstations - HEPA filtered enclosures - Portable Glove box

Designed to protect the user,
the environment and to save energy



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The Erlab® Group, a worldwide leader

Number 1 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 possible in terms of their 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 to laboratories in the chemical, pharmaceutical, cosmetic, agro-food, hospital, and academic markets.

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

For us, compliance with standards is fundamental. Based on scientific criteria, the AFNOR NF X 15-211: 2009 standard attests to 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 environmentalism a top priority. All of our solutions have been designed to limit the 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)



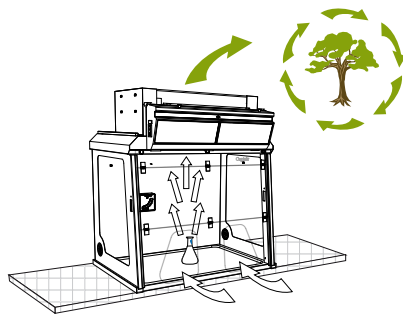
A state-of-the art R&D laboratory

Strengths

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

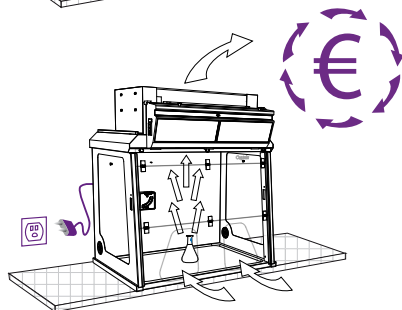
Protect the environment

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



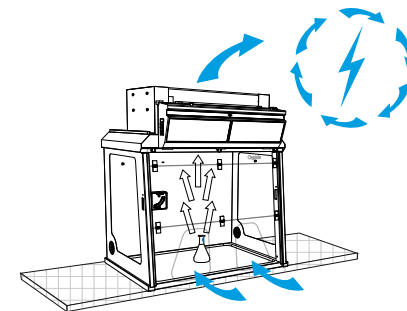
Eliminate installation costs

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.



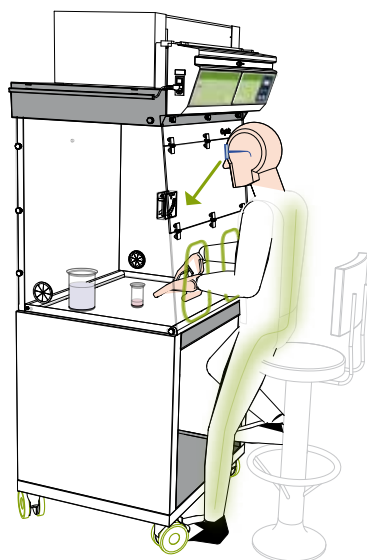
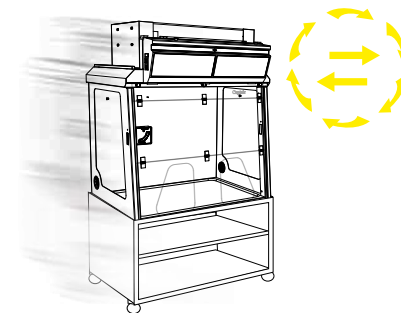
Save on energy costs

The air balance necessary to run ducted systems results in high energy consumption. A Captair® solution eliminates the energy costs related to systems for 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 air balance of the equipment.



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 the 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

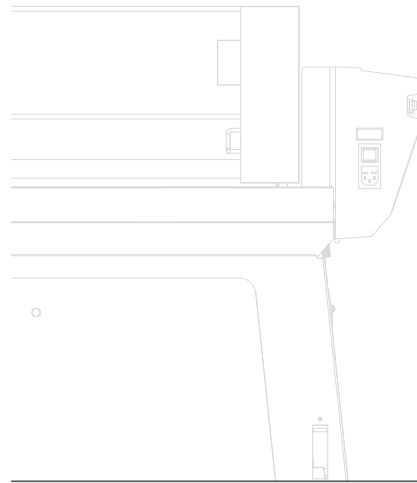
- Activities can be performed either seated or standing, without fatigue
- Rounded-edge work surfaces: provide an armrest for the forearms
- Slanted front comfortable working posture

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 criteria of the AFNOR NF X 15-211: 2009 standard, 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 that used by an average-sized house. The many advantages offered by Captair® fume hoods help to reduce your environmental and budgetary impact.

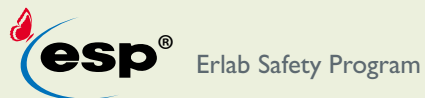


Calculate and compare the actual operating cost of a Captair® ductless fume hood.

	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 lasting commitment to your safety

Our laboratory analyzes the interactions between molecules and validates the filtration technology best suited to your applications.

Based on this scientific analysis, our laboratory will recommend the device, the filtration column 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 for 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. The specialists in our laboratory will suggest the type of fume hood and filtration technology that best correspond to your activities within 48 hours. We are committed to ensuring 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 the estimated service life of the filter. Your fume hood has been validated with these criteria in mind. This certificate serves to constantly remind the user or the safety manager of the details regarding appropriate use of the device.

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 to check for filter saturation as well as through the 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 authorized for use 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 pose an inhalation risk that could affect the 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 (OEL/TLV), expressed in parts per million (PPM).

These dangerous, ever-present pollutants, generated by the day-to-day handling of chemicals, require all laboratories to adopt preventative and protective measures in accordance with the regulations in effect. Drawing on over 40 years of filtration technology experience, Erlab has developed Flex® technology,

which, through the combination of molecular and HEPA particle filtration technology, provides a comprehensive protection solution for the 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 trap airborne chemical pollutants in a stable, irreversible manner.

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

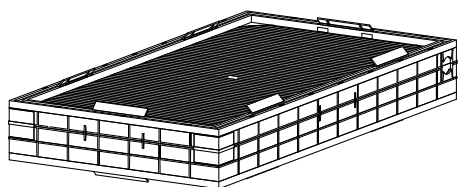
A very strict set of specifications, developed by Erlab and based on compliance with international standards, allows us to select the raw materials and to create technologies with the proper porosity. Inspired by military-type gas masks, these technologies are able to adsorb a very wide range of molecules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

Our experience, based on over 30 years of testing and 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 the environment.

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

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

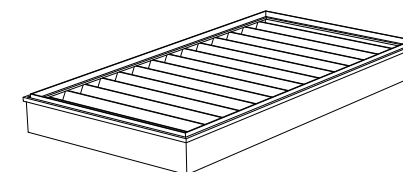


Types of carbon filters

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% effectiveness, according to the MPPS method set forth in the EN 1822-1 standard.



Flex[®] technology

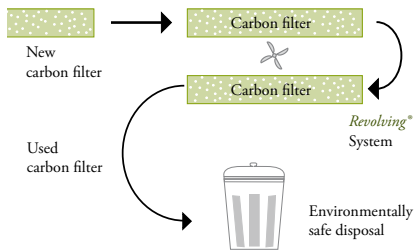
Patent pending



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 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.

- 25% increase in the retention capacity of the main filter;
- 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: 2009 standard!

A class-I configured filtration column (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 that emit 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 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 offers 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

Automatic filter saturation detection

Face velocity monitoring system

Bright, energy-efficient lighting

Electrical and fluid lines can be run into the enclosure

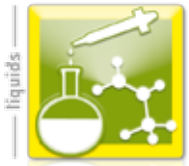
Slanted front

Vibration-absorbent work surface, high chemical and mechanical resistance

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** Tests and markings **CE**

Dimensions (mm)	M 321 & Midcap		
	L	D	H mini/max
Interior	764	540	860
Exterior	800	620	1120/1290

Technical specifications

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

	M 321
Including electricity for the lights	19 - 53 Watts
Type of opening	Oblong
Structure	Anti-corrosion steel coated with acid-proof heat-set polymer
Panels	8 mm synthetic glass
Filtration module	Polypropylene

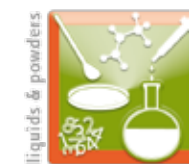
M 39I



M 48I



Flex® Technology



Except M 48I



Tested according to the
ASHRAE 110: 1995 standard
Tests and markings **CE**

Dimensions (mm)	M 39I			M 48I		
	L	D	H _{min x max}	L	D	H _{mini/max}
Interior	965	540	860	1240	540	860
Exterior	1000	620	1120/1290	1274	620	1120/1290

Technical specifications

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

	M 39I	M 48I
Including electricity for the lights	19 - 53 Watts	19 - 71 Watts
Type of opening	Oblong	
Structure	Anti-corrosion steel coated with acid-proof heat-set polymer	
Panels	6 mm synthetic glass	
Filtration module	Polypropylene	

Flex[®] Technology



XLS 392



XLS 483



+ Tested according to the
ASHRAE 110: 1995 standard
Tests and markings **CE**

Dimensions (mm)

	XLS 392			XLS 483		
	L	D	H mini/max	L	D	H mini/max
Interior	965	680	1038	1240	680	1038
Exterior	1000	800	1290/1470	1274	800	1290/1470

Technical specifications

	XLS 392	XLS 483
Number of filtration columns	2	3
Number of fans (IP44)	2	3
Air flow rate	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 - 264 V / 50 Hz	

	XLS 392	XLS 483
Including electricity for the lights	38 - 88 Watts	57 - 141 Watts
Type of opening	Total	
Structure	Anti-corrosion steel coated with acid-proof heat-set polymer	
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 Tests and markings **CE**

Dimensions (mm)	XLS 633			XLS 714		
	L	D	H mini/max	L	D	H mini/max
Interior	1566	680	1038	1765	680	1038
Exterior	1600	800	1290/1470	1800	800	1290/1470

Technical specifications

	XLS 633	XLS 714
Number of filtration columns	3	4
Number of fans (IP44)	3	4
Air flow rate	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 Hz	

	XLS 633	XLS 714
Including electricity for the lights	57 - 141 Watts	76-194 Watts
Type of opening	Trapezoid	Total
Structure	Anti-corrosion steel coated with acid-proof heat-set polymer	
Panels	6 mm synthetic glass	
Filtration module	Polypropylene	

Control panel

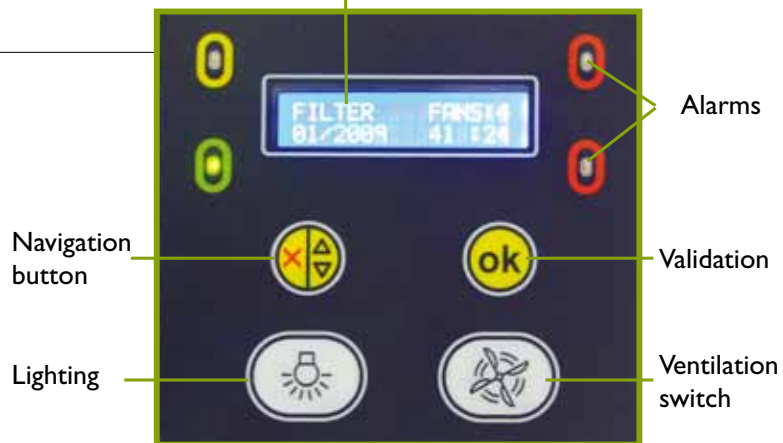
Flow monitor

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 notifies the user, every 60 hours, of 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).

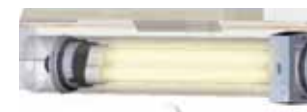
(Equipment not included on devices equipped with the Molecode S option.)

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 - IP68.

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

Energy Ports



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

Chemical Listing

A guide to Erlab-approved chemicals

This guide includes a comprehensive list of the 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 guides includes almost 700 chemicals and lists the following for each of these chemicals: the 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 type of test related to the handling of the chemical.

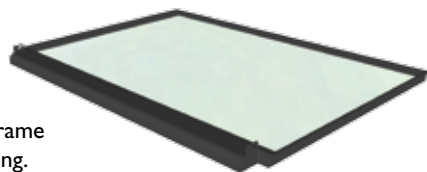


The product of 40 years of R&D!

Work surfaces

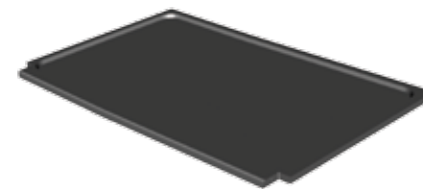
Glass work surface

- Tempered glass work surface with attached frame
- Ergonomic arm rest for comfort while working.



Phenolic resin work surface

- Work surface with built-in spill tray, made of phenolic resin, with an ergonomic arm rest for comfort while working.
- High chemical and mechanical resistance.
- Ideal for weighing operations that require precision.



Work benches and shelves

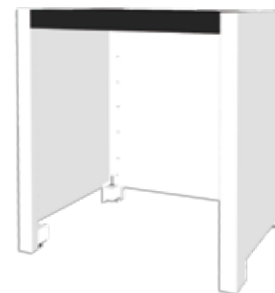
Mobicap™*

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



Benchcap™

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



Interior metal sliding shelf for Mobicap™ and Benchcap™.



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

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 ambient air of the laboratory and indicates the pollution level.

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 the activities performed within 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 provide 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 guarantees 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



Automatic filter saturation detection

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

Ergonomically-customized for weighing activities

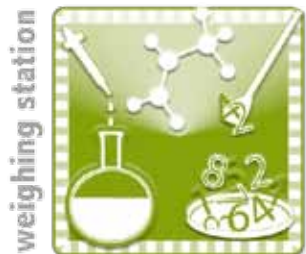
Bright, energy-efficient lighting

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



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



Tested according to the ASHRAE 110: 1995 standard Tests and markings **CE**

M 32I



M 39I



M 48I



XLS 392



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	540	860	965	540	860	1240	540	860	965	680	1038
Exterior	800	620	1120/1290	1000	620	1120/1290	1274	620	1120/1290	1000	800	1290/1470

* See pages 10-13 for additional technical specifications



Interior lighting

- IP68 - 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 measurements.
- Prevents static charges caused by items within the enclosure.
- Easy to clean.



Waste port (optional)

- 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 in the air of the room.

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 from the flasks and bottles of chemicals.

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 ambient air of the laboratory.

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



Very quiet ventilation system

Elimination of harmful, odorous vapors

High corrosion-resistance



Storage capacity from 10 to 360 liters



No ducted airflow system

Purification of the ambient air in the laboratory

Lockable storage solution

Storage of compatible and/or incompatible chemicals

Spill tray with absorbent mat

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



Shelf 812

Storage capacity: 10 1 liter bottles containing compatible chemicals.



Ministore 822 small storage cabinet

Storage capacity: 48 1 liter bottles 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



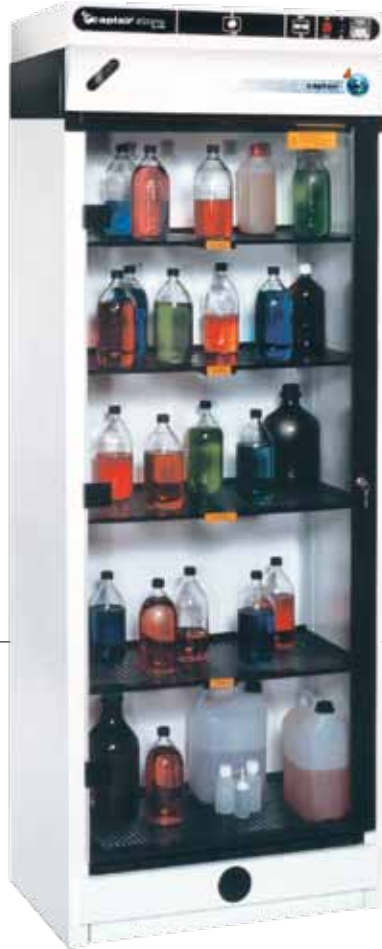
To be placed underneath a work surface
No.: 822 D

Technical specifications

Filter type	AS (organic vapors) BE (organic chemicals and acids)	Air renewal	25 times/min (Shelf 812) - 9.9 times/min. (Ministore 822)	Veneer	Acid-proof polyester over electrogalvanized steel
Fan	Quiet ventilation fan	Voltage/frequency	230 volts / 50 hertz	Number of shelves	Ministore 822: 2
Volume of air treated	75 m3/h	Electrical power	19 watts		
		Retention tray volume	2x1 liters (with absorbent mat)		

AVP 804 & Midcap AVP 804

Storage capacity: 180 1 liter bottles of compatible chemicals.



AVPS 804 & Midcap AVPS 804

Storage capacity: 180 1 liter bottles containing compatible and/or incompatible chemicals.



+ Tests and markings

Dimensions (mm) AVP and AVPS 804

	L	D	H
Interior	700	425	1730
Exterior	800	505	2150

Technical specifications

Filter type	AS (organic vapors) BE (organic chemicals and acids)
Fan	Quiet ventilation fan
Volume of air treated	90 m ³ /h

Air renewal	3 times/min.
Voltage/frequency	230 volts / 50 hertz
Electrical power	47 Watts
Retention tray volume	2x3 liters (with absorbent mat)

Veneer	Acid-proof polyester over electrogalvanized steel
Number of shelves	AVP : 4 - AVPS : 8

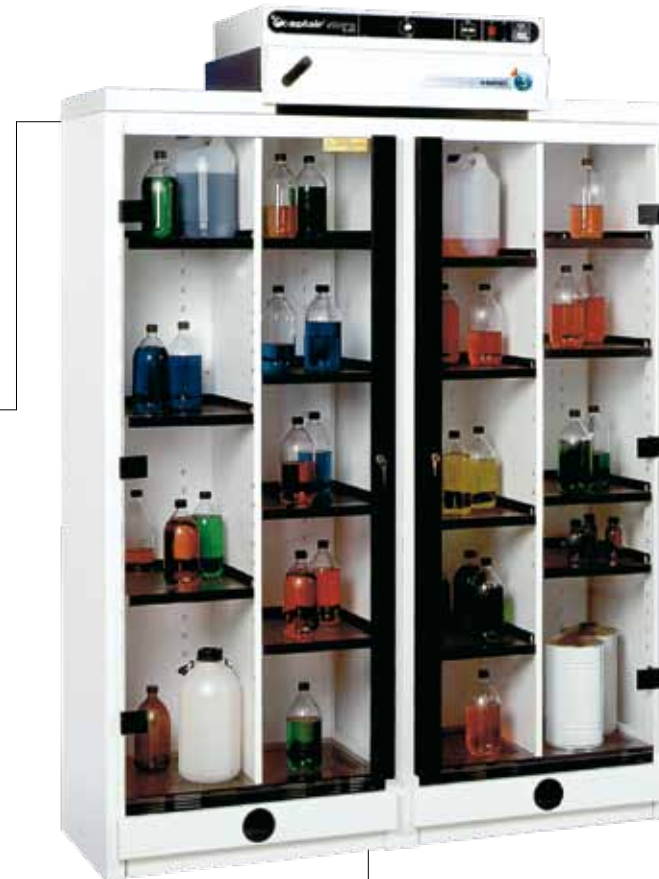
AVPD 804 & Midcap AVPD 804

Storage capacity: 360 1 liter bottles containing compatible and/or incompatible chemicals.



AVPDS 804 & Midcap AVPDS 804

Storage capacity: 360 1 liter bottles containing compatible and/or incompatible chemicals.



+ Tests and markings **CE**

Dimensions (mm) AVPD and AVPDS 804

	L	D	H
Interior	2x700	425	1730
Exterior	1600	505	2150

Technical specifications

Filter type	AS (organic vapors) BE (organic chemicals and acids)
Fan	Quiet ventilation fan
Volume of air treated	90 m ³ /h

Air renewal	90 times/min
Voltage/frequency	230 volts / 50 hertz
Electrical power	47 Watts
Retention tray volume	2x3 liters (with absorbent mat)

Veneer	Acid-proof polyester over electrogalvanized steel
Number of shelves	AVPD : 8 - AVPDS : 16

Standard equipment

AVP 804 - AVPS 804 - AVPD 804 - AVPDS 804

Fan Failure - Alarm used to monitor proper functioning of the ventilation system

Mounted date marker to manually label filter replacement dates.

Viewing window to identify the type of filter installed.

Lock for secure access to the chemicals.

Air sampling probe for filter saturation tests.

Adjustable-height shelves with magnetic labels to identify the various chemicals being stored.

Spill tray with absorbent mat. 3-6 liters capacity

HCL box for storing corrosive acids

Optional equipment

AVP 804 - AVPS 804 - AVPD 804 - AVPDS 804

Securifilter® Electronic alarm to detect when the filter has become saturated by solvents

Double door Only for the AVPS 804 and AVPDS 804 models

Double door





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 the applications performed within.



Radiation time adjustment system

HEPA H14 filtration (RNA/DNA model)

Automatic shut-off of the UV lamp when the door is opened

UV decontamination

Enclosure is highly resistant to UV rays

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 little 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	Air flow rate	175 m ³ /h
Filter type	HEPA H14	Air renewal	90 time/min.
Face velocity	0,53 m/s	Voltage/frequency	230V / 50Hz
Internal volume of the enclosure	0,2 m ³	Electrical power	73 Watts

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% effectiveness, according to the MPPS method set forth in standard EN 1822-1.
Timer	Used to set UV lamp radiation time between 5 and 30 min.
UV cut-off	Automatic shut-off of the UV lamp when the door is 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 of the product 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 effectiveness 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 the requirements of ISO class 5* (EN ISO 14-644 standard), 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 pharmaceuticals industry. The items located within the enclosure are thus protected from any outside contamination.

Dimensions (mm)	L	D	H
Interior	608	565	560
Exterior	645	600	830

Technical specifications

Filter type	HEPA H14
Face velocity	0.4 to 0.6 m/s
Internal volume of the enclosure	0.305 m3
Air flow rate	175 m3/h
Air renewal	9.6 times/min
Voltage/frequency	230 V/50 Hz
Electrical power	78 watts

Standard equipment

Anemometer	Continuous monitoring of face velocity
Fan failure alarm	Detection of ventilation system failures
Work surface	Made of metal with rounded edges.
Ports	To run electrical and fluid lines into the enclosure.

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

Commissioning, training, and maintenance

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



Flowcap™ 700



Air quality within the enclosure: ISO 5*

Optional equipment

Exterior lighting	500 lux, adjustable, allows the application to be properly illuminated.
Rolling cart MOBICAP®	Metal rolling cart, equipped with 4 wheels (2 locking wheels). Equipped with an adjustable shelf.
Transparent back panel	Made of synthetic glass. Offers 360° visibility of the operations being performed within the enclosure and optimizes lighting conditions.

Applications :

- Non-pathogenic cell cultures
- In-vitro cultures
- Microbiology
- Electronics
- Optics, etc.

Laboratories specializing in biology, botany, electronics, pharmaceutical, cosmetics, etc.

For research done on-location and in the laboratory

- Protection of the operator
- Protection of the 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 walls 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



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 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 (OEL or TLV-TWA) are handled. This standard sets forth performance and information criteria related to:

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

Classes established by the standard:

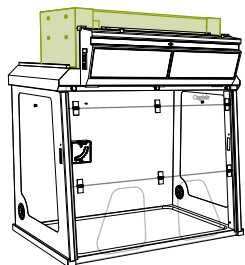
Class 1	Class 2
Ductless fume hood with back-up	Ductless fume hood without back-up
A main level of filtration and a back-up level of filtration	A single level of filtration

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.

**Vapor 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

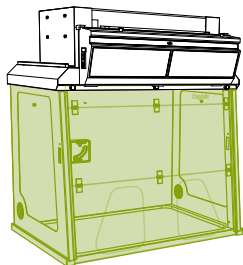
This refers to the filter's ability to trap noxious molecules handled in the enclosure and characterizes the quality of the recirculated air downstream from the filter.

	Class 1	Class 2
Normal operating phase	Detection phase during which the concentration downstream from the filters must be less than 1% of the VLEP	
Detection phase	Detection phase during which the concentration downstream from the 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 from the filters must be less than 50% of the VLEP
Safety phase	Safety phase during which the concentration downstream from the 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 the tests performed on our filters demonstrate the technological performance developed by Erlab. These results guarantee users of Captair® Flex® fume hoods a 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



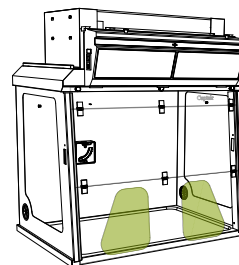
Enclosure containment efficiency

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. Samples are taken of the air at the location of the grid. Based on the concentrations of gas emitted and the 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 enclosure of the ductless fume hood.

The containment limit set forth by the AFNOR NF X 15-211:2009 standard requires that the concentration of the SF₆ gas be no more than 0.1 ppm at the detection points on the grid.



Face velocity

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

For ductless fume hoods with a fixed face, the face velocity at all openings must fall 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 the 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 the "CHEMICAL LISTING," a guide to authorized chemical agents that provides an analysis of approximately 700 chemicals. 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

Commissioning and maintenance by

The leading international network of licensed technicians providing commissioning, training, and maintenance services for ductless fume hoods and storage cabinets used in a laboratory setting.

Commissioning and training

Our Asura department and its network of licensed technicians provide commissioning and training services for your Captair® ductless fume hoods and cabinets.

Our technicians offer user training to ensure compliance with best practices.



Maintenance

Our Asura department is here to assist you with all of the maintenance operations related to your device.

Whether preventative or corrective, our technicians have all of the resources necessary to perform the checks related to:

- Face velocity
- Containment
- Filter saturation level, using exclusive verification procedures and protocols that comply with the AFNOR NF X 15-211: 2009 standard.

Visit us on the web

www.erlab.com

Discover 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

- Filters: High performance super activated carbon molecular filters for the filtration of air polluted by toxic gases compatible with all brands.
- Maintenance: The first international network of approved technicians for the maintenance of super activated carbon laboratory filtration systems of all brands.



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EcoLabel

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