

Ductless fume hoods Filtering cabinets Ventilation

Safety storage cabinets & ductless fume hoods for hazardous materials

N°23.4

Lithium-ion cabinets

Flammable cabinets

Corrosive cabinets

Toxic cabinets and Multirisk

Anti-fire equipments Documents cabinets

Shelvings Containment Cans

Showers and first-aid equipments







We have done quiet a road together. Thanks to our dear clients and partners, we remain the prime **Swiss manufacturer of safety cabinets for the storage of dangerous products** but also to assert ourselves as one of the leaders in the ductless fume hoods market. Our continuous research and development allows us to propose a variety of fume hoods in accordance with the strictest standards.

We have broaden our know-how by developing our ranges towards new markets focused on new technologies while staying loyal to our profession: **Ensure the safety of goods and peoples.** We are talking here about our newest range of security cabinets for Lithium-ion battery, a material used more and more in our day-to-day life but more dangerous that it seems. Leader and expert in safe usage and storage of hazardous products for laboratories, communities and the industry, we are happy to introduce you our newest catalog that we have continuously improved in a condensed format for its paper version and broaden for its digital format on **www.ecosafesa.com.**

We have focused our research and development program by respecting the following three values:



1. MANUFACTURE IN COMPLIANCE WITH CURRENT AND STANDARDS:

Ecosafe is an active member of the European Committee for Standardization (CEN) in the following working groups:

- CEN/TC 332/WG 2 «Furnishing and installation».
- CEN/TC 332/WG 4 «Fume hoods and associated ventilation».
- CEN/TC 332/WG 6 «Emergency safety showers».
- CEN/TC 332/WG 8 «Microbiological Safety Cabinets».
- ISO/TC 336 Laboratory design
- CEN / TC 207 Furniture/WG 5 Requirements for non-domestic furniture
- AFNOR/B35A Laboratory equipment and materials

To be committed at European level, we are above all defenders of French values, by being an active member of the FABRILABO Syndicat, and we act at the French level. Standardization committee UNM 61 «Laboratory installations».



2. A MANUFACTURING KNOW-HOW:

Since 50 years, we favor manufacturing in Europe **and favor European partnerships** within our manufacturing network. These values of quality and safety have always been anchored in us even more today.



3. COST EFFICIENCY AND OPTIMIZATION ALLOWING TO OFFER COMPETITIVE RATES:

During the health crisis that hit everyone, we were able to work as locally as possible, in France, by handling not only the production and its quality but also keeping the prices as attractive as possible.

ECOSAFE IN TIMELINE

1971

Birth of the group in France.

1999

- Opening of **ECOSAFE** in Switzerland.
- 1st ventilation and filtration box adaptable to all types of cabinets.

2003

1st anti-corrosive cabinet.

2005

1st 30 mins fire resistant cabinet according to the EN14470-1 standard.

1987

- 1st range of fire resistant cabinets controlled at the CNPP.
- 1st Cendrex fire resistant ashtray certification

2000

Participation in the 1st European Committee for Standardization.

2002

- Development of our manufacturing and logistic service in Dreux over 2000 m²
- 1st 20 mins fire resistant cabinet according to the UNE 23-802-79 standard.
- 1st 30 mins fire resistant cabinet according to the DIN 12925-1 standard.

2004

- 1st 60 mins fire resistant cabinet according to the EN 14470-1 standard.
- 1st bungalow and cabinet for the storage of phytosanitary.



EN 14470-2

NFX 15-211 **EN** 15154-1 **EN** 15154-2

Today, the ranges of products presented in this catalog represent the accomplishment of those principles.

ECOSAFE products are conform to the strictest standards in our industry:

- EN 14470-1 for our safety cabinets for flammables.
- NF X 15-211 version 2009 for our ductless fume hoods.

• EN 15154-1 and EN 15154-2 for our safety showers and eyewashers.

ECOSAFE quality system responds to the international ISO 9001 version 2008 standard.

ECOSAFE IS:



A **technical support** and on the ground sales support to assist our distributors and evaluate the **users needs by emphasizing optimal safety.**



An efficient logistic solution **to guarantee delivery** and setting up when needed.

On time at the right place in good

On time, at the right place, in good condition.



The distribution of ECOSAFE products ranges is guaranteed by a network of specialized local and **international** resellers/partners to advise and serve

you to the best.



A continuous presence on **all the main professional** exhibitions in the World.



A whole team to serve you with **a dedicated** sales contact for each country.



cabinets and fume hoods sold all around the World.



of manufacturing for mastering accrued productivity and quality.



440000

of **centralized storage** to deliver rapidly all around the World.

1100

references of cabinets, fume hoods and safety products to answer to all the clients needs.





2009

1st cabinet resisting to 90 mins. Fire tested 105 mins according to EN 14470-1.

2012

Development of our over 5000m² manufacturing and logistic service in Dreux.

2015

Double certification of our fire resistant cabinets according to FM6050 and EN 14770-1 - 30mins.

2018

Opening of our export office in Hong Kong.

2020

Opening of our export office in Korea.

2008

 1st recirculation hood in compliance with standard NFX 15-211 Class 2.

2013

The testing laboratory is certified according to ISO 17025.

2017

Double certification of our fire resistant cabinets according to FM 6050 and EN 14470-1 - 90mins.

2019

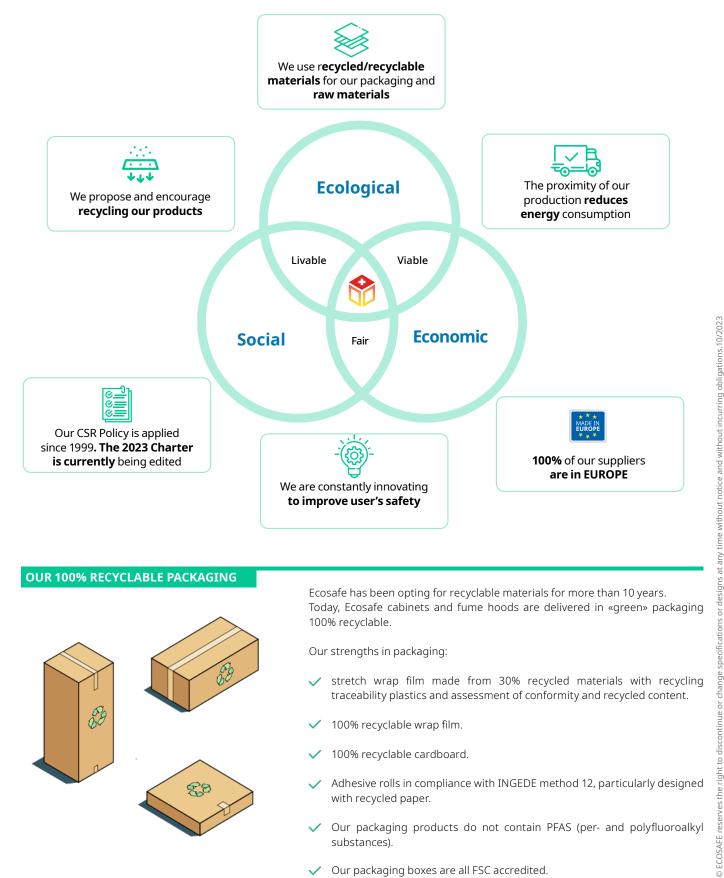
- Opening of our export office in Italy.
- New design for our fire resistant cabinets according to FM 6050 and EN 14470-1 – 90mins.

2021

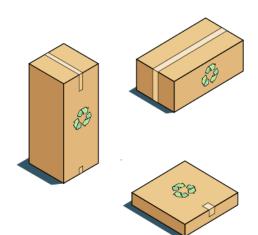
1st ductless fume hood according to the NF X 15-211 Class 1 standard. Launch of our lithiumion cabinets.

OUR RESPONSIBLE PRACTICES

Ecosafe has been engaged since 1999 in a responsible approach and now committed to CSR complete, integrating environmental and societal initiatives. The development of eco-design to reduce the footprint of its products and to favor local suppliers (100% European) in order to limit transport. It implements responsible waste management through recycling and reuse. Ecosafe continually innovates to strengthen user's security, through tests products, and team training. Committed to CSR, Ecosafe formalizes its CSR charter, in order to strengthen its actions regarding sustainability and responsibility. Finally, Ecosafe actively encourages the recycling of materials used by its customers.



OUR 100% RECYCLABLE PACKAGING



Ecosafe has been opting for recyclable materials for more than 10 years. Today, Ecosafe cabinets and fume hoods are delivered in «green» packaging 100% recyclable.

Our strengths in packaging:

- stretch wrap film made from 30% recycled materials with recycling traceability plastics and assessment of conformity and recycled content.
- 100% recyclable wrap film.
- 100% recyclable cardboard.
- Adhesive rolls in compliance with INGEDE method 12, particularly designed with recycled paper.
- Our packaging products do not contain PFAS (per- and polyfluoroalkyl substances).
- Our packaging boxes are all FSC accredited.

curring obligations. 10/2023

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THE C.S.R ADVANTAGES OF OUR EQUIPMENT

European manufacturing

ECOSAFE is committed to European manufacturing of its products. By producing locally in its factories, ECOSAFE supports the national economy and limits its carbon footprint. The made in France allows ECOSAFE a better control of work conditions and compliance with environmental standards. To strengthen its social commitment, ECOSAFE sources its supplies from European suppliers sharing the same ethical values and sustainable production.

Product standardization

ECOSAFE standardizes its products according to recognized European and International standards, proof of its commitment towards society. By designing its equipment according to standards raised socially and ecologically, ECOSAFE limits the risks for its employees, its customers and the planet. Certifications obtained reassure stakeholders about ECOSAFE's quality of products. Standardization often involves frugal innovations for more sustainability, that is to say simple, economical in resources, sustainable and inclusive, which make it possible to optimize the use of materials, energy and technologies, in order to design products that are more environmentally friendly and accessible to as many people as possible.

European materials

ECOSAFE favors materials produced in Europe, thus reducing its logistics carbon footprint. ECOSAFE ensures that its raw materials are extracted and ethically processed by its European suppliers. The traceability of materials from source is a priority for ECOSAFE, proof of its CSR commitment. ECOSAFE requires its suppliers to comply with EU regulations and to favor short circuits. This European supply allows ECOSAFE to build relationships of trust with its partners.

No REACH substance

ECOSAFE bans any REACH substance from its products, controlling thus chemical risks. ECOSAFE audits its suppliers, imposes materials that are 100% REACH compliant and informs its teams of this regulation. The objective of ECOSAFE is to make maximum use of natural, renewable materials from the circular economy. REACH compliance is for ECOSAFE an imperative responsibility

Material from recycled product

ECOSAFE incorporates recycled materials into its products, thus limiting the exploitation of natural resources. By involving the teams via eco-design, ECOSAFE optimizes the integration of these recycled materials. ECOSAFE also informs its customers of the environmental benefits of this approach. The circular economy, of which recycling is the pillar, is part of ECOSAFE's DNA of since 1999.

Forest-friendly wood PEFC

ECOSAFE uses almost exclusively PEFC-labelled wood, certified sustainable and ethical. ECOSAFE requires its suppliers to use this traced wood PEFC (or equivalent label) and informs its customers on the guarantees provided by this certified label. ECOSAFE aims for PEFC certification of its entire wood supply chain, proof of its commitment to CSR.

Local stocks

ECOSAFE has a local stock, thus reducing the carbon footprint of its logistics and streamlining its supplies. ECOSAFE monitors the social and environmental conditions of its storage sites, audited regularly. Dynamic management of stocks, linked to customer demand, is an area of innovation at ECOSAFE for ever greater logistics efficiency.

Optimization of transport and optimized tour

ECOSAFE continually optimizes the transport of its goods, thanks to the rationalization of its logistics and the use of route algorithms with its partners. ECOSAFE is looking for maximum reduction in kilometers traveled and CO2 emissions and costs. Optimized logistics is beneficial for ECOSAFE both economically and ecologically for all.

Short transport

ECOSAFE favors local transport, in kilometers traveled, to reduce its logistics carbon footprint. Strong territorial anchoring of ECOSAFE allows it to source and market in short circuits and above all as direct as possible without unnecessary detours. ECOSAFE made the strategic choice to locate almost all of its production in France since 1999. Local transport involves for ECOSAFE to rethink the organization of its logistics flows, an environmentally profitable investment.

Reduced energy impact

ECOSAFE has set itself the objective of radically reducing its impact on energy, in line with the Paris Agreement. Audits, efficiency, carbon compensation, and adoption of green energies are ECOSAFE's priority axes to decarbonize its activities and move towards net zero emissions. An ecological imperative consistent with ECOSAFE values

Recycling and purification of ambient air

ECOSAFE offers with LABOPUR® recycling systems and air purification for its industrial sites. In addition to ecological benefits in terms of carbon footprint, these installations improve air quality to protect the health of employees and team. A powerful social and environmental commitment, representative of the ECOSAFE philosophy.

Ergonomic furniture for the well-being of employees

ECOSAFE provides everyone with ergonomic furniture to prevent musculoskeletal disorders. By designing them and finding the best ergonomics/cost ratio, ECOSAFE invests in well-being and therefore the performance of its clients' teams. The comfort of ECOSAFE employees is also a major axis for the company of commitment to CSR.

Filter recycling

Concerned about the environmental impact of its products, ECOSAFE encourages its customers to recycle end-of-life filters. Thanks to partnerships established with specialized players, ECOSAFE offers its customers a simple solution to recycle their filters used:RECYFILTRE@. ECOSAFE collects used filters from of its customers to extract new raw materials secondary. This commitment to filter recycling demonstrates.

Maintaining safety through simplified maintenance

ECOSAFE has adopted predictive maintenance on its industrial sites, both to strengthen the security of its operations and their efficiency. ECOSAFE equipment is designed to be reliable, easily controllable and repairable. Technical training teams and the traceability of interventions are priorities at ECOSAFE. The objective is optimal maintenance for maximum safety.

Product sustainability

ECOSAFE designs its products for a long lifespan. Thanks to eco-design, ECOSAFE uses fewer materials and standardizes components. A responsible approach representative of the DNA of ECOSAFE, going against the tide of planned obsolescence.

Product recyclability

ECOSAFE is committed to making its products easily recyclable, from their design. Limitation of materials, standards, eco-design, everything is thought of for the dismantling and future recycling of ECOSAFE equipment.. At the end of their life, ECOSAFE takes back used products via its privileged partner to extract new raw materials secondary, in a circular economy logic.

Specific sorting channel

ECOSAFE has set up for its customers a dedicated sorting and extensive recycling of its industrial waste. Thanks to the training and equipment for its employees, and partnerships with recycling specialists, ECOSAFE maximizes the valorization of its waste. A goal of 100% recycled or reused waste which demonstrates ECOSAFE's commitment to the circular economy.

Recyclable packaging

ECOSAFE has chosen 100% recyclable packaging to complete the loop of the circular economy. ECOSAFE has established partnerships with recycling players and designs its packaging to optimize their recyclability. ECOSAFE also raises awareness among its customers about sorting and recycling of this virtuous packaging. An approach consistent with the sustainable DNA of ECOSAFE.

Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments

File cabinets

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THE C.S.R ADVANTAGES OF OUR EQUIPMENT

Range	Manufacture French / European	Product standardization	European material	No REACH substance	Material from recycled products	PEFC forest-friendly wood	Local stock	Transport optimization and optimized touring	Short-circuit transport	Reduced energy impact	Recycling and purification of ambient air	Ergonomic furniture for the well-being of employees	Maintaining safety through simplified maintenance	Product durability	Product recyclability	Specific sorting channel	Recyclable packaging	Filter recycling
790+	FRANÇAISE	~	~	~	~	~	/	V	~			/	_	_	/	~		
790+B	FRANÇAISE	_	/	/	~	~	~	V	~			/	~	_	✓	/		
790+M	FRANÇAISE	~	~	~	V	~	~	~	~			/	~	~	~	/	~	
790+T	FRANÇAISE	V	~	Y	V	V	V	V	V			V	~	~	/	/	V	
790F	PRANÇAISE	/	<u> </u>		Y	Y	_	V	<u> </u>	<u> </u>		V	~	V	/	/	/	
AD76+	HARRAISE	/	_	_	/	Y	Y	/	Y	<u> </u>		Y	Y	/	/	/	/	
AD79+	FRANÇAISE	/	/	\	Y	Y	\	/	<u> </u>	<u> </u>		Y	\	Y	<u> </u>	/	\	
790+ARD	MARKAISE	Y	/	/	Y	V	/	/	\	<u> </u>		/	/	Y	\	/	\	
790+IA	FABRICATION PRANÇAISE	V	/	/	Y	V	V	/	\	/		V	/	/	V	/	/	
790+LI	PATAGORE	✓	-	-	×	V	-	/	<u> </u>			Y	\	/	Y	/	/	
790FLI	FRANÇAISE	/	-	-	×	~	-	\	<u> </u>			Y			<u> </u>	/		
11+	FRANÇAISE	~	\	/	~		/	/	<u> </u>			\		/	V	V	/	
8A	PRODUCTION OF THE PRODUCTION O		\	\			\	\	\	<u> </u>		/	\	/	/	/	/	
8B	FRANÇAISE		/	/		\	/	/	V			/	/	/	V	/	/	
8E	FRANÇAISE		/	/	~		V	/	V			V	/	/	V	V	/	
AA 2/5	FRANCISE MARIS IN EUROPE	✓	-	/			-	/	/			/		/	/	/	<u> </u>	
3/5 13	MADE IN EUROPE			/			✓ ✓	/	V			/	/	/	/		✓ ✓	
AD4	EUROPE WADE IN EUROPE		/	V				/	V					/	/			
5LI	europe wwo: 34		/	/			✓	V	/			/	/	/	/	/	/	
3030	EUROPE MARGEATION FRANÇAISE	✓	~	/			<u> </u>	~				V			~	/	~	
3030M	FRANÇAISE FRANÇAISE FRANÇAISE	~	× /	×_		Y	× /	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u> </u>			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	× /		<u> </u>		~	
3030PV	FRANÇAISE	~	<u> </u>	~		/	Ž		<u> </u>			\ <u>\</u>	× /	\ <u>\</u>	<u> </u>	-	~	
3030T	FRANÇAISE	~	<u> </u>	~		V	<u> </u>	~	~	<u> </u>		~	<u></u>		~	~	~	
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7630BG	FRANÇAISE	~	~	~		~	*	~	~	~		~	V	~	-	~	V	
AD30	FRANÇAISE FRANÇAISE	~	~	~		~	~	~	Ż	Ż		~	~	~	-	~	Ż	
1	FRANÇAISE	_	~	~	/	Ť	Ż	'	~	Ż		-	V	-	-	~	~	
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H+	FAGRECATION FRANÇASSE	~	~	✓	/		V	V	✓	✓	~	V	~	~	✓	~	~	~
12+	FRANÇAISE	V	~	✓	V		V	V	/	✓	V	V	~	V	/	V	V	~
14X	FARRECATION FRANÇAISE	V	~	~	~		~	V	V	~	V	V	V	V	/	V	~	~
V	FRANÇAISE	✓	~	~	~		~	~	/	✓	✓	✓	~	~	/	V	✓	✓
HN		✓	✓	~			~	/	✓	/	✓	V	~	~	✓	~	~	✓
14D	MAZE IN EUROPE		~	~			~	~	✓			V	~	~	✓	~	~	
14E	MADE IN EUROPE		~	~			~	~	/	/		~	~	~	/	~	✓	
14ELI	WADE IN EUROPE		/	~			~	/	/			/	/	~	/	/	/	
14FLI	WADE IN CULTURE		~	/			/	/	/			~	~	~	/	/	~	
AD3	WADE IN EUROPE		/	/			/	~	/	/		~	~	~	/	/	/	
16E	WADE 26 EUTOPE		/	/			/	~	/			~	~	~	/	/	~	
14L			/	/			/	V	<u> </u>	<u> </u>		V	V	V	/	/	V	
14T			/	/			~	/	/			/	V	V	/	/	/	
16K			/	Y			Y	/	V	\		Y	Y	Y	Y	/	/	
16L			/	_			Y	Y	<u> </u>	<u> </u>		Y	\	Y	<u> </u>	/	/	
21			/	/			/	/	/	/		/		/	\	/	/	

REMINDER OF STANDARDS AND LEGISLATION

EN
14470-1

European standard EN 14470-1: Concerns flammable products in laboratories. Flammable products used and handled in laboratories must be stored in one or more cabinets with a minimum fire resistance of 15 minutes. 4 types of fire resistance are defined: 30, 60 and 90 minutes.



European standard EN 14470-2: Concerns the storage of compressed gas cylinders in laboratories. It applies to cabinets whose total internal volume allows the storage of gas cylinders with a total capacity of less than 220 litres.



European standard EN 16121: this standard specifies the requirements for determining the safety, strength, durability and stability of all types of storage furniture for collective use.



Draft Standard EN 17242: This document applies to recirculating filtration fume cupboards. It includes design and manufacturing requirements and type test procedures.



FM (Factory Mutual): International insurance and accrediting body for fireproof equipment and advising companies. FM approval means, among other things, 10-minute fire resistance for safety cabinets in accordance with the NFPA 251-1969 temperature curve.



cnpp fse 98-006 specifications: Automatic extinguishing must meet precise speed and efficiency specifications.



Standard NF X 15-211 - May 2009: Concerns the quality of ventilation and filtration as well as the quality of containment of recirculating fume cupboards designed for handling chemicals in laboratories.



European standards EN 15154-1/EN 15154-2: These standards apply to first-aid equipment, particularly showers and washbasins connected to the water network.



French standard NF X 15-221: This standard applies to body showers connected to the water network and used on industrial sites and premises other than laboratories. The requirements of this standard are based on those of European standard EN 15154-1.



NT FIRE 017: Swedish standard setting the benchmark for the document and IT storage cabinet market. 3 types of fire resistance are defined: 30, 60 and 90 minutes.



European standard EN 1869-2019: specifies the requirements for single-use fire blankets intended for use in controlling small fires. Fire blankets of sufficiently large dimensions are considered suitable for use on people whose clothing is engulfed in flames.



European standard NF EN ISO 1182: this standard specifies a test method for determining the non-combustibility performance of construction products.



recommendation for risk prevention and safety. ED753 (Storage and transfer of hazardous chemicals) and ED6015 (Storage of chemicals in the laboratory): Products that are incompatible with each other (acids and bases) should be stored in different cabinets or in separate compartments.



Article R4227-22 of the Labour Code: Premises or areas in which substances or preparations classified as explosive, oxidising or extremely flammable are stored or handled, as well as materials in a physical state likely to give rise to risks of explosion or instantaneous ignition, must not contain any source of ignition. These premises must have suitable permanent ventilation.



Article R4412-17 of the Labour Code: The employer must take the necessary measures to prevent concentrations of flammable substances or chemical products in the workplace, as well as any risk of spills, splashes or spillage of products likely to cause thermal or chemical burns.



Article R4412-18 of the Labour Code: The employer must take the necessary measures to avoid the presence in the workplace of ignition sources likely to cause fires or explosions, or the existence of unfavourable conditions which could lead to unstable chemical substances or mixtures of substances having dangerous physical effects. It must also ensure that the harmful effects on the health and safety of workers in the event of fire or explosion resulting from the ignition of flammable substances, or the dangerous effects due to unstable chemical substances or mixtures, are mitigated.



Article R4422-1 of the French Labour Code: The employer must take preventive measures to eliminate or reduce to a minimum the risks resulting from exposure to biological agents.



GHS - Globally Harmonised System of Classification and Labelling of Chemicals (concerns only the marking of the container of the chemical itself, not the marking on safety cabinets): drawn up by the ILO (International Labour Organisation), the OECD (Organisation for Economic Co-operation and Development) and the UN SCETMD (Sub-Committee of Experts on the Transport of Dangerous Goods of the Economic and Social Council of the United Nations - not to be confused with ISO 7010 and ISO 3864.



ISO 7010 / ISO 3864 (concerns the marking affixed to safety cabinets): ISO 7010 prescribes the safety signs to be used for accident prevention, fire-fighting and health hazard information. The shape and colour of each safety sign and the design of the graphic symbols comply with ISO 3864.



Article L511-5 of the Education Code: The use of a mobile telephone or any other electronic communications terminal equipment by a pupil is prohibited in nursery schools, elementary schools and lower secondary schools and during any teaching-related activity taking place outside their premises, with the exception of circumstances, in particular educational uses, and places where the internal regulations expressly authorise it. In secondary schools, the school rules may prohibit the use by a pupil of the devices mentioned in the first paragraph in all or part of the school premises and during activities taking place outside the school premises. This article does not apply to equipment which pupils with a disability or disabiling health condition are authorised to use under the conditions laid down in Chapter 1 of Title V of Book III of this Part. Failure to comply with the rules laid down in application of this article may result in the confiscation of the equipment by management, teaching, educational or supervisory staff. The internal rules set out the procedures for confiscation and return.



Article R1342-21 of the Public Health Code: When the substances or mixtures mentioned in article R. 1342-20, as well as substances and mixtures classified as carcinogenic, mutagenic or toxic for reproduction categories 1A and 1B are held by professionals with a view to their use, they are stored in a place or location to which unauthorised persons are forbidden access.

discontinue or change specifications or designs at any time without notice and without incurring obligations. 10/2023

Order of 22 September 2021 amending the ministerial orders of 24 September 2020 and 3 October 2010 relating to the storage of flammable liquids, operated within an installation classified for environmental protection subject to authorisation, the order of 26 May 2014 relating to the prevention of major accidents in classified installations mentioned in Section 9, Chapter V, Title I of Book V of the Environment Code and the order of 4 October 2010 relating to the prevention of accidental risks within installations classified for environmental protection subject to authorisation. For flammable liquids: for each mobile container somatiners containing at least one flammable liquid (or combustible liquefiable solid), the minimum volume of the spill containment is at least equal to either the total capacity of the containers if this capacity is less than 800 L; or 50% of the total capacity of the containers with a minimum of 800 L if this capacity exceeds 800 L. For the storage of flammable liquids in mobile containers of the fusible type, the minimum volume of the spill containment is at least equal to the total capacity of the containers. For other liquids likely to cause water or soil pollution, the spill containment must have a volume at least equal to the greater of the following two values: 100% of the capacity of the largest tank; 50% of the total capacity of the tanks. For the storage of mobile containers with a unit capacity of 250 litres or less, the minimum volume of the spill containment is equal either to the total capacity of the containers when this is less than 800 litres, or to 20% of the total capacity of the drums, with a minimum of 800 litres if this capacity exceeds 800 litres. The spill containment is impermeable to the products it may contain and is resistant to the physical and chemical action of the products that may be collected.



Article 4221-1 of the Labour Code: The employer shall take the necessary measures to ensure the safety and protect the physical and mental health of workers. These measures include: 1° Measures to prevent occupational risks, including those mentioned in article L. 4161-1; 2° Information and training measures; 3° The introduction of appropriate organisation and resources. The employer shall ensure that these measures are adapted to take account of changing circumstances and aim to improve existing situations.



European regulation CLP (Classification, Labelling and Packaging) and its adaptations: EC regulation 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures. Clarifies incompatibilities when storing chemicals: some products can react with each other, sometimes causing explosions, fires, splashes or the emission of dangerous gases. Incompatible materials must therefore be



REACH: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006. European Union regulation adopted to protect human health and the environment from the potential risks of chemical substances. It applies to all chemical substances. REACH establishes procedures for the collection and evaluation of information on the properties and hazards of chemical substances. It establishes identical and transparent information on the nature and risks of substances, on their own or in a mixture, from the supplier to the end customer. REACH stands for Registration, Evaluation and Authorisation of Chemicals. It came into force on 1 June 2007.



European standard NF EN 13501-1: used to classify materials on the basis of test results. The classification is based on reaction to fire tests carried out in the laboratory, and is expressed in «classes» from A to F (also called «euroclasses» in simplified language). Reaction to fire is the ability of a product or component to contribute or not to the development of fire. This ability is determined for each classification.

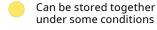


European standard NF EN 13501-2: enables the fire classification of construction products and elements based on fire resistance test data. Fire resistance is a measure of how long complete construction elements retain their mechanical, thermal insulation and waterproofing properties (REI - EI or I, 30, 60, 90, 120 classification).

CHEMICAL INCOMPATIBILITIES

									(*
I explode			×	×	×	×	×	×	/	×
I make it blaze		×	/	×	X	×	×	×	/	×
I'm on fire		×	X	/		×	×	×	×	X
I'm under pressure		×	×		/		×	×	×	×
I gnaw		×	×	×						
I kill		×	×	×	X		/	/	/	/
I do serious harm		×	×	×	×		/	/	/	/
I damage health and the ozone layer	(/	/	×	X		/	/	/	/
I pollute	*	×	×	×	×		/	/	/	/

Cannot be stored together



Can be stored together

PRECAUTIONS FOR USE

In accordance with standard EN14470-1, and to avoid any possible confinement of vapours, mechanical ventilation is required to ensure air renewal. We offer a wide range of filtration and ventilation housings, please refer to our product documentation.

In all cases, it is the responsibility of each end-user to contact their company's safety officer or their chemical supplier before storing their products in cabinets designed for storing chemicals. According to recommendation for risk prevention and safety. recommendations, and for safety reasons (chemical reactions between incompatible products), products of different kinds must be stored separately. A cabinet can therefore be used to store one type of chemical (flammable, toxic, corrosive, etc.). If you want to store small quantities of different families of chemicals in a single cabinet, you should use a multi-risk cabinet.

Please note that some cabinets are not suitable for storing highly corrosive (nitric acid, sulphuric acid, hydrochloric acid, etc.) and highly flammable products. Please consult us or your dealer for the solution best suited to your needs.

HOW TO CHOOSE THE RIGHT SAFETY CABINET TO MEET YOUR NEEDS?

THE RIGHT QUESTIONS TO ASK WHEN CHOOSING THE RIGHT SAFETY CABINET

All polluting, flammable or combustible products must be stored in suitable retention drums in terms of volume, physical and chemical properties so that they can be stored safely.



Which product family do you stock?

- · 🙆
- 1. Flammable
- .
- 2. Corrosive(1)
- .
- 3. Toxic (1)



- 4. Hazardous to the environment
- · **(!**>
- 5. Health hazard



How much space and volume do you need to store?

Each range has different cabinet sizes (under-cabinet, countertop, tall, with one or two doors) to suit your space and volume.



Do users complain about fumes?

If so, consider fitting the cabinet with a ventilation or filtration box. See the guide to ventilation equipment on the following pages.



Do you have to opt for fire resistance?

Our ranges include cabinets without fire resistance and cabinets with fire resistance. On the latter, we offer 30, 60 and 90 minutes fire resistant cabinets. Our 90 minutes cabinets have been successfully tested up to 105 minutes



Do you want a fire resistant cabinet?

YES

There are different levels of fire resistance. Some cabinets comply with the European standard EN 14470-1 with a fire resistance of 30, 60 or 90 minutes.

In general, the duration is chosen according to 3 criteria:

- The time it takes for the fire brigade to intervene on site
- The flammability rate of the products
- The budget to be allocated

Other ranges of cabinets comply with the international standard FM 6050 which corresponds to a 10 minutes fire test.

Ranges available:

APPROVED EN14470-1 EN1363-1	90 minutes fire resistant cabinets	Range 790+
APPROVED EN14470-1 EN1363-1	90 minutes fire resistant cabinets with drawers	Range 790+T
APPROVED EN14470-1	60 minutes fire resistant cabinets	Range 760+
APPROVED EN14470-1	30 minutes fire resistant cabinets	Range 3030
APPROVED EN14470-1	30 minutes fire resistant cabinets with drawers	Range 3030T
APPROVED EN14470-1	30 minutes fire resistant cabinets with glass doors	Range 3030PV
APPROVED EN14470-1	30 minutes fire resistant under-bench cabinets	Range 7030
FM safety ca	binets	Range 2

NC

Ranges available without fire resistance:

Cabinets with integrated fire extinguisher	Range 1
Safety cabinets for dangerous products	Range 14E
Modular multi-risk safety cabinets (steel or glass doors)	Range 14
Safety cabinets for dangerous products	Range 14L
Safety cabinets with drawers	Range 14T

FIND OUR INTERACTIVE SELECTION GUIDE ON ecosafesa.com

(1) Corrosive products (including acids and bases), (picto). Toxic products (including CMR products, polluting/environmentally hazardous products, harmful and irritating products).

2. Storage of

Firstly, note that corrosive products are divided into two categories: Acids and Bases. These two types should be stored in separate compartments.

Are your products concentrated and aggressive?

The main thing to consider is that corrosive products can attack metal. If your products are concentrated and aggressive, we recommend PVC cabinets.

Anti-corrosion cabinets in PVC	Range 8A+
--------------------------------	-----------

If the products are diluted or little aggressive, we recommend melamine based cabinets (good resistance to corrosive) or cabinets

Do you store acids and bases, or only one of the 2 category?

Storage of acids AND bases - ranges available :

Anti-corrosion cabinets in melamine	Range 8B+
Modular and compartmentalised safety cabinets	Range 14

Storage of acids OR bases - ranges available:

Anti-corrosion cabinets in melamine	Range 8B+
Safety cabinets for dangerous products two-colored design	Range 14E
Modular safety cabinets and compartments	Range 14
Safety cabinets for dangerous products	Range 14L
Safety cabinets with drawers	Range 14T





3. Storage of toxic products

The storage of toxic products requires only retention tanks, key locking system, a standardized labeling and minimal natural ventilation.

Ranges available:

Safety cabinets for dangerous products	Range 14E
Modular safety cabinets and compartments	Range 14
Safety cabinets for dangerous products	Range 14L
Safety cabinets with drawers	Range 14T
Safety cabinets for reagents and toxic products	Range 13





4. Storage of plant protection products

The storage of plant protection products only requires retention bins, a lock, a standardised pictogram and minimal natural ventilation.

Ranges available:

Safety cabinets for phytosanitary products	Range 16L
Safety cabinets for pesticides	Range 16K
Safety cabinets for phytosanitary products in green colour	Range 16E









5. Storage of several families of products

Do you want a fire resistant cabinet?

YES

There are different levels of fire resistance. Some cabinets comply with the European standard EN 14470-1 with a fire resistance of 30 or 90 minutes

In general, the duration is chosen according to 3 criteria:

- The time it takes for the fire brigade to intervene on site
- The flammability rate of the products
- The budget to be allocated

Other ranges of cabinets comply with the international standard FM 6050 which corresponds to a 10 minute fire test.

Ranges available:

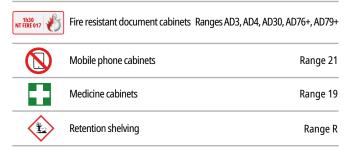
APPROVED 90 minutes fire resistant multirisk cabinets	Range 790+M
90 minutes fire resistant multirisk cabinets with PVC or melamine for the storage of aggressive acids	Range 11+
30 minutes fire resistant multirisk cabinets	Range 3030M

Ranges available without fire resistance:

Modular multi-risk safety cabinets	Range 14
Under-cabinet safety cabinets	Range 6
Safety cabinets with drawers	Range 14T
Safety cabinets for dangerous products	Range 14L
Safety cabinets for dangerous products two-colored design	Range 14E

AND ALSO_

We also have cabinets for:



HOW TO CHOOSE THE RIGHT DUCTLESS FUME HOOD **FOR YOUR NEEDS?**

THE QUESTIONS TO ASK WHEN **CHOOSING THE RIGHT DUCTLESS FUME HOOD THAT SUITS YOUR NEEDS**

Why choose a filtration hood rather than an exhaust hood? External discharge is recommended when handling CMR substances, or if you handle too many chemicals classified in different product families. Active charcoal filters lose their efficiency above 30°C.





1. What space do you have to handle your products? How much working surface do you need?

The range includes hoods with width of 600 mm, 900 mm, 1200 mm, 1500 mm and now 1800 mm.

Most of them offer several types of working opening.





2. What will you be handling under the hood?

The range allows you to handle liquids, powders or both.





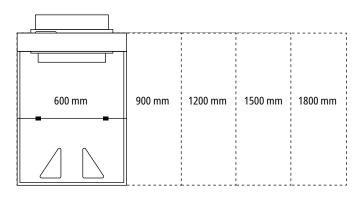
3. Do you require an active charcoal filter per filtration module, as well as an automatic saturation detector for your filters (class 1 fume hood - mandatory option to be chosen)?



4. Where do you want to position your hood? Do you need a worktop with a containment sump? Do you need light?

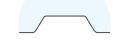
1. What space do you have? What type of working opening do you need?

Choose the size of your hood



Choose your working opening





Two openings

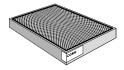
One trapezoidal opening (not possible with a single ventilation box in 900 and 1200 mm)

2. What will you be handling under the hood?



Liquid products only?

In this case, you will need active charcoal filter(s)





Powder products only?

In this case you will need: HEPA filter(s) + SH200 + CAR200 (only for class 2 hoods)

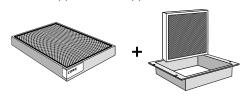






Liquid and powder products?

In this case you will need: active charcoal filter(s) + HEPA filter(s) + SH200

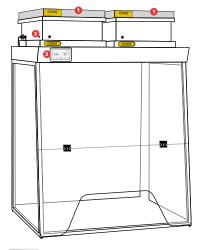


3. Do you require a safety active charcoal filter per filtration module and an automatic saturation detector for your filters?



1 YES

In this case you benefit from a class 1 fume hood, conforming to the NF X 15-211 standard - May 2009, by French laboratories and control bodies.



Safety active charcoal filter

E-detect chemical saturation sensor for active charcoal filter (mandatory option to be chosen)

Touch screen interface filtralarme 5





& powder use









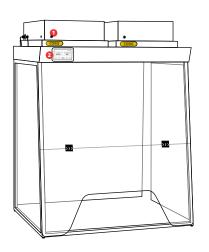
HEPA filter Safety active charcoal filter



Active charcoal filter

CLASSE 2

In this case you benefit from a class 2 hood, which also complies with the NF X 15-211 standard - May 2009, by French laboratories and control bodies.



Sampling, manual control of saturation of active charcoal filters.

Touch screen interface filtralarme 5









For powder use only



Connection kit AAAAAAAAA HEPA filter





For liquid &

powder use





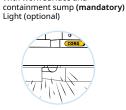
Active charcoal filter MAMAMAM HEPA filter

4. What positioning & options?



Your bench

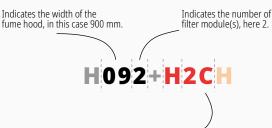
- · With work surface and containment sump (optional)
- Light (optional)



With work surface and

Our range of tables (3 differents)

COMPOSITION OF A FUME HOOD REFERENCE



This section is for Class 1 only.
H" indicates the presence of a HEPA filter. 2C" indicates the two active charcoal filters. Here the "H" is placed at the beginning: The HEPA filter is under the housing. On the other hand if the H is at the end, the HEPA filter is located above.



HOW TO CHOOSE THE RIGHT LITHIUM CABINET FOR YOUR NEEDS?

THE RIGHT QUESTIONS TO ASK WHEN CHOOSING THE RIGHT LITHIUM-ION CABINET

The employer have to take the necessary measures to avoid the presence in the workplace of ignition sources likely to cause fires or explosions, or the existence of unfavorable conditions which could lead to unstable chemical substances or mixtures having dangerous physical effects. It must also take care to mitigate the harmful effects on the health and safety of workers in the event of fire or explosion resulting from the ignition of flammable substances, or the dangerous effects due to unstable chemical substances or mixtures.



What space do you have available and what volume do you need to store?

Each range includes several cabinet sizes (countertop, tall, with one or two doors) to suit your space and the volume of your batteries.



What does the extinguisher consist of?

Metal fires, and lithium in particular, are extremely difficult to stop. Nevertheless, the technology developed by our experts uses a combination of potassium nitrate and polyepoxide to act on the lithium fire. This extinguisher requires no specific maintenance during its 15-year service life.



Is it dangerous for humans?

No, but it is of course advisable to ventilate properly to remove stale air.



How does a smoke detector work?

This is an optical smoke detector, where an electrical voltage is applied to the terminals of the electrodes, causing a current to flow as a result of the ionization of the air in the chamber. When smoke particles enter the chamber, the intensity of the current is disturbed, triggering the detector's alarm.



Should you opt for fire resistance?

Our product range includes 90-minute fire-resistant cabinets. These cabinets have been successfully tested up to 105 minutes. They are the safest solution for preventing the risk of fire and explosion.



1. Storing and charging lithium-ion batteries

Do you want a fire resistant cabinet?

YES

Different levels of fire resistance are available. Some cabinets comply with European standard **EN 14470-1**, with a fire resistance of 90 minutes for external fires. They may also comply with standard **NF EN 13501-2**, with fire-stop construction from the inside to the outside of the cabinet, of 15 or 180 min.

Ranges available:



NO

Ranges available without fire resistance:

Safety cabinets for battery charging	Range 14ELI
Safety cabinets without charging	Range 14FLI



2. No-charge storage lithium-ion batteries

do you just want to store your batteries, whether they're damaged, end-of-life or new?

Damaged batteries should be stored separately from functional ones.

Ranges available:

105 ESTED [FIREWALL EN 13501-2] 90-minute fireproof cabinets	Range 790+LI
TESTED NICES TESTED Wide cabinets 90-minute fire protection	Range 790FLI
Double-walled insulated safety cabinets	Range 5LI
Safety cabinets without charging	Range 14FLI
Battery safety case	Range VTLI



3. Storage and transport of lithium-ion batteries

Do you want to transport your new, used or damaged batteries?

Ranges available:

Transport cases for batteries Range VTLI

AND ALSO _

We also offer equipment to limit the spread of fire:

Lithium-ion battery fire extinguishers

Range EXLI

EQUIPMENT & OPTIONS

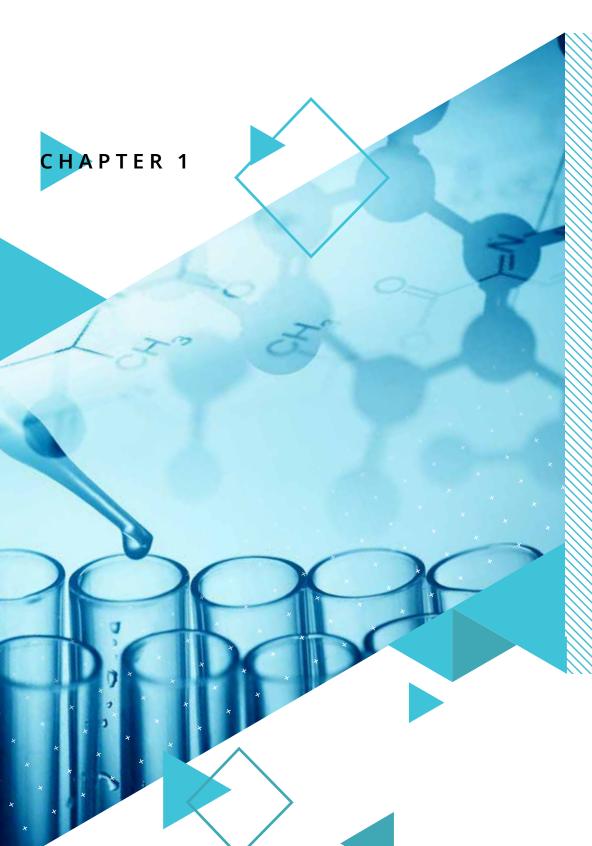
STORAGE & CHARGING	790+Li	790FLi	5Li	14ELi	-
STORAGE without charging	790+Li	790FLi	5Li	14ELi	14FLi
Perforated shelves	~	~	~	~	•
Retention shelves & insulating cushion	•	•	•	•	~
Containment sump in lower section	~	~	~	~	~
Connected wifi alarm	•	•	~	~	~
Self-contained fire extinguisher	~	~	~	~	۰
Fire extinguisher with smoke detector/light/ alarm box can be wired to SSI box Hole for cable routing at top	~	~	•	•	•
Drilling for cable entry bottom part	~	~	~	۰	•
Drilling for cable entry individual	•	•	•	~	~
[OOOOOO] Rack of 9 sockets	~	~	~	~	•
Code lock	~	~	•	~	~
Connected box ventilation system	~	~	~	~	~

ACTIVE CHARCOAL FILTERS SELECTION GUIDE

MODELS	FILTER TYPES	VAPOR FILTERS	P/N FROM 2021	WEIGHT (KG)	FOR	P/N BEFORE 2020
		Organic	ORG200	11	<u>Fume hoods Range H :</u> H06+, H09+, H12+,	ORG500 ⁽²⁾ ORG1500 ORG2500 ORG3500
		Corrosive			H15+,H18+, H200, PMSF200 Cabinets Range 12+: AF2+, AF22+, AF42+, AF43+, AF44+,	COR500 ⁽²⁾ COR1500 COR2500 COR3500
		Polyvalent ⁽¹⁾	CORG201	11,5		CORG501 ⁽²⁾ CORG1501 CORG2501 CORG3501
A THE PERSON	H 70 x L 545 x P 380 (mm)	Formaldehyde	FOR200	12	Two filters required for P/N: H500, H1500, H2500, H3500, PMSF500, PMSF1500, PMSF3500	FOR500 ²² FOR1500 FOR2500 FOR3500
		Ammonia	AMM200	12		AMM500 ⁽²⁾ AMM1500 AMM2500 AMM3500
	H 70 x L 730 x P380 (mm)	Organic	ORG300	16	Fume hoods Range H :	ORG400 ORG1300 ORG2300
		Corrosive	CODC 204	45	H300,H400, H1300, H2300, PMSF300, PMSF400, PMSF1300, PMSF2300	COR300 COR400 COR1300 COR2300
		Polyvalent ⁽¹⁾	CORG301	15	Cabinets range 12X: AF2X, AF2-2X, AF4-2X,	CORG401 CORG1301 CORG2301
		Formaldehyde	FOR300	16	AF4-3X, AF4-4X, AF1X, AF1X1,AF2X1, AF2C, AF22C, AF42C, AF43C, AF44C, AF1C, AF1C1 et AF2C1.	FOR400 FOR1300 FOR2300
		Ammonia	AMM300	16	(After July 2008)	AMM400 AMM1300 AMM 2300
		Organic	ORG203	13	Compatible MF3-AS	ORG203
- 806 NU - Filtair 623/633 MF - Filtair 936/936-1 MF - Filtair XL 1046/1346/1646 MF		Corrosive Polyvalent(1)	CORG203	13	Compatible MF3-BE	CORG203
- Filtair XL 9156 MF - Midcap 633 MF	H 100 x L 565 x P 405 (mm)	Formaldehyde	FOR203	13	Compatible MF3-F	
	11 100 X 2 303 X 1 403 (11111)	Ammonia	AMM203	13	Compatible MF3-K	
- Filtair 814/824/834 HEPA/ Charcoal		Organic	ORG303	15	Compatible MF4-AS	ORG303
- Filtair XL 1044/1344 MF - Filtair XL 8104/8124 MF - Midcap 804 MF - Store AVP 804 MF - Store AVP 804 MIdcap MF - Store AVPD 804 MF		Corrosive Polyvalent ⁽¹⁾	CORG303	16	Compatible MF4-BE	CORG303
- Store AVPD 804 Midcap MF - Store AVPS 804 MF - Store AVPS Midcap 804 MF	H 100 x L 755 x P 405 (mm)	Formaldehyde	FOR303	16	Compatible MF4-F	-
- Store AVPSD 804 MF - Store AVPSD Midcap 804 MF - Store AVVE 804 MF		Ammonia	AMM303	16	Compatible MF4-K	-
		Polyvalent ⁽¹⁾	CORG53	7	Compatible F2BE	-
- Schoolcap AVPS 802 - Store 832	H 404 x L 380 x P 50 (mm)	Organic	ORG53	6	Compatible F2AS	-
- Ministore 822	II 404 v. I. 404 v. D.50 ()	Polyvalent ⁽¹⁾	CORG13	4	Compatible F1BE	-
- Shelf 812	H 404 x L 191 x P 50 (mm)	Organic	ORG13	3	Compatible F1AS	-

	FILTER TYPES	VAPOR FILTERS	P/N FROM 2021	WEIGHT (KG)	FOR	P/N BEFORE 2020
		Organic	CDFORG	4		CDF-F20
		Corrosive			Box Range V:	CDF-F35
	ron	Polyvalent ⁽¹⁾	CDFCORG	4	CDF-A, CDF-P, CVAT, CMAT, CTAT	CDF-F15
1000 - A	H 150 x Ø 150 (mm)	Formaldehyde	CDFFOR	4	Cabinet Range 12 : AF10	-
		Ammonia	CDFAMM	4		-
labopur		Organic	ORG50	8		CDF-F720
This S		Corrosive	CODCEA		Fume hoods Range H : H70	CDF735
	P. In	Polyvalent ⁽¹⁾	CORG51	9	Box Range H: H50	CFR CFR70 CFR715 CORG51
	H 70 x L 390 x P 390 (mm)	Formaldehyde	FOR50	8	Cabinets Range 12 : AF1, AF2 (before February 2002)	-
		Ammonia	AMM50	8		-
		Organic	ORGFC	10		FC20
		Corrosive			Cabinets range 12:	FC35
Tonal Division in the last of		Polyvalent ⁽¹⁾	CORGFC	10	AF1, AF2, AF2-2, AF4-2, AF4-3, AF4-4	FC15
		Formaldehyde	FORFC	10	(before July 2008) H40	-
		Torridaterryae				
	H 200 x L 100 x P 400 (mm)	Tormalachyae				
	H 200 x L 100 x P 400 (mm) narcoal filters can adsorb the vast major fic applications for all models of fume h	Ammonia rity of commonly used prod	AMMFC ucts: corrosive produ	_		-
	narcoal filters can adsorb the vast major	Ammonia rity of commonly used prod	AMMFC ucts: corrosive produ	ıcts, organic		+
	narcoal filters can adsorb the vast major	Ammonia rity of commonly used prod	AMMFC ucts: corrosive produ	ıcts, organic		+ +
	narcoal filters can adsorb the vast major	Ammonia rity of commonly used prod	AMMFC ucts: corrosive produ	ıcts, organic		+ -

NFX 15-211 FILTRATION LAMINAR FLOW HOODS, FORCED VENTILATION CABINETS





Range H+ class 1



Range H+ class 2





Range 12+



Range 3030X



Range V

NFX

CLASS 1















DUCTLESS FUME HOODS labopur® NF X 15-211 MAY 2009 - CLASS 1 & 2



▲ H184G+2CH + BB18 + 8 x (CORG201) + 4 x (SH200 + HEP200) + SATORG

WHY SHALL WE USE A DUCTLESS FUME HOOD?

When you handle chemicals, your health is at risk because of the emanation of harmful or even toxic vapors or powders. In order to protect yourself and your direct surrounding, you should handle your products in a ductless fume hood (formerly a filtered air recirculating toxic cabinet or FACC) equipped with either a molecular filter (or active charcoal filter), a particle filter (or HEPA filter), or a molecular filter and a particle filter.

WHY SHALL WE CHOOSE A labopur® DUCTLESS FUME HOOD?

ECOSAFE has 52 years' experience in the field of safety cabinets for the storage of hazardous products and puts all its know-how and technique in the manufacturing of its **labopur®** fume hoods.

Labopur® fume hoods are manufactured in France based on processes and procedures defined according to the ISO 9001 version 2008 quality standard.

Moreover, our know-how has been successfully tested by

independent French laboratories and control bodies according to the NF X 15-211 standard in its May 2009 version.

CERTIFICATION

The performances of **labopur®** filtration hoods have been evaluated according to the NF X 15-211 - MAY 2009 standard by French laboratories and control bodies for:

- Filtration tests.
- · Containment tests.
- Leakage and integrity tests of the absolute filter (HEPA filter).

Labopur® filtration fume hoods are manufactured according to quality processes and procedures defined in according to the international standard ISO 9001 version 2008, at the end of the production line and before shipment, in order to guarantee the user perfect operation and efficiency.









STANDARD

Standard NF X 15-211 - May 2009:

The NF X 15-211 standard is the most demanding regulation currently in force. It guarantees the user enhanced safety, allowing him to concentrate on his work.

Toxic enclosures with filtered air recirculation are classified according to 2 safety levels:

Class 1: enclosure with safety reserve (2 active charcoal filters per filtration column)

Class 2: enclosure without safety reserve, the most commonly used enclosure (only 1 active charcoal filter per filtration column)

The NF X 15-211 standard also distinguishes 3 classifications according to the type of filtration, depending on the chemical agents filtered:

- · Type P: for the filtration of particles (only for class 2).
- Type V: for the filtration of vapors (available for classes 1 and 2).
- PV type: for particle and vapor filtration (available for classes 1 and 2).

labopur® ductless fume hoods are filtration chambers.

Depending on the model, class 1 can be equipped with one particle filter and two active charcoal filters, or with only two active charcoal filters per filtration column.

Class 2 can be equipped with one particle filter or one active charcoal filter, depending on the model, or with one particle filter and one active charcoal filter per filter column.

Labopur® fume hoods can be equipped with 1 to 4 filtration columns depending on the model.

In order to comply with this standard, Labopur® filtration fume hoods must meet various criteria (summary):

- the fume hood must be equipped with a ventilation device (continuous monitoring of the system) in order to maintain the air speed at a value between 0.4 m/s and 0.6 m/s (class 1 and class 2).
- the filtration system of the enclosure must not exceed a release concentration, downstream of the filter(s), of 50% of the Occupational Exposure Limit Value (OELV) of the toxic substance handled in the enclosure, and this for the duration of the detection operation
- the fume hoods must have been tested by an approved and independent laboratory.
- Class 2 fume hoods must have an audible or visual alarm triggered by a clock every 60 hours of operation and a sampling device
- Class 1 fume hoods shall be equipped with an automatic monitoring and saturation detection device for the main active charcoal filter and a second active charcoal filter in reserve.
- Class 1 fume hoods must not discharge more than 1% of the TLV of the product handled downstream of the active charcoal filter during the detection operating time.
- Class 2 fume hoods must not discharge more than 50% of the OELV of the product handled downstream of the filter during the detection operating time.

NEW CLASSIFICATION OF DUCTLESS FUME HOODS IN ACCORDANCE WITH PREN 17242.

Classification into 3 parts as follows: X (general type of application) / Y (filter class) / Z (monitoring arrangement)

Details are given below.

X: General type of application :

Class A: RFFC with integrated filters;

Class B: RFFC with associated filters.

Y: Filters:

- 1: Particulate filter only;
- 2: Gas and vapour filter only;
- 3: particulate, gas and vapour filters;
- 4: Other filtration devices or arrangements, including those for RFFCs with internal filters.
- Z: Filter monitoring devices:

0: no filter condition monitoring devices;

1: integrated continuous filter condition monitoring devices applicable to the filter application. EXAMPLE

Examples of RFFC designations with integrated particulate and chemical filters and continuous monitoring of filter conditioning: Class A / 3 / 1 .



H092Z+H2C + BV09 + 2 x (SH200 + HEP200) + 4 x (CORG201) + SATORG

Lithium-ion

Fume hoods, filtering cabinets - Ventilation

Flammable cabinets

cabinets

Toxic cabinets and Multirisk

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CLASS









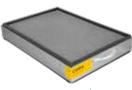






ACTIVE CHARCOAL AND PARTICLE FILTERS

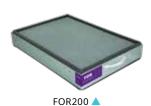
ACTIVE CHARCOAL FILTERS







AMM200 A



Active charcoal is a black powder with a porous structure that adsorbs the molecules emanating from the vapors of dangerous products through its micro pores of less than 2 μ m.

Depending on the chemicals to be filtered, the active charcoal can be impregnated to improve its adsorption capacity. Impregnation for one chemical will lead to excellent adsorption for that chemical, but poor adsorption for another type of chemical.

Our filters are made from the best active charcoals. In order to offer the best guarantees, the adsorption quality of the filters has been checked and approved by an independent testing laboratory. Each filter is equipped with a double dust filter to ensure optimal filtration quality.

Several types of filters are available as standard:

- · For corrosive and organic vapors type CORG
- For organic vapors type ORG
- For ammonia vapors type AMM
- For formaldehyde vapors type FOR

high efficiency particulate air filter.

with a diameter greater than or equal to 0.3 µm.

your fume hood must be equipped with a filter holder type SH.

The CORG multipurpose active charcoal filters can adsorb the vast majority of products commonly used: corrosive products, organic compounds or solvents. This filter can therefore be used in most cases. We can also offer you specialised filters, impregnated, for example, for the handling of more specific chemicals. Contact us for all your special requirements.

A HEPA (High Efficiency Particulate Air) filter, also known as a THE (Very High Efficiency) filter, is a very

The filtration efficiency of HEPA filters is governed by the NF EN 1822 standard which defines 5 efficiency classes. A HEPA H14 filter, with the highest filtration efficiency, will stop 99.97% of particles

When handling powders, a HEPA filter should be used. We offer HEPA filters of class H14 in accordance to the NF EN 1822 standard and with the highest filtration efficiency. In order to receive a HEPA filter,

HEPA H14 FILTERS AND HEPA FILTER HOLDERS



SH200 + HEP200 A



Your HEPA filter can be complemented with an active charcoal filter for maximum safety and filtration

If you wish to use your fume hood only for powder filtration, you should buy a «Connection kit for use without active charcoal filter» type CAR.

N.B.: A fume hood can only be delivered to you if it has an active charcoal filter and/or a HEPA filter with a «Connection kit for use without active charcoal filter» type CAR if necessary.













EQUIPMENTS

STANDARD EQUIPMENT



PROTECTIVE CAPS

Each hood is equipped with four protective caps to easily insert your electrical or gas cables, for example.



FILTRALARME 5 TOUCHSCREEN INTERFACE

- The filtralarme 5 controller uses an electronic circuit to measure the air flow speed (0.4- 0.6 m/s) and thus to detect and warn you of filter clogging or any air flow anomaly by means of an audible and luminous signal in accordance to the NF X 15-211 standard.
- The automatic airflow regulator (0.4-0.6 m/s) analyses the airflow speed in real time and checks that the hood is working at low pressure, guaranteeing that the vapors are confined to the work area and that the vapors pass through the filter.
- Hour counter (60 hours): an audible and luminous signal invites you to check the saturation of the active charcoal filter.
- New intuitive touchscreen interface with full functionality to make daily use of the hood easier.



TRANSPARENT WALLS

Our hoods are supplied with robust transparent walls on all sides, giving you a bright working area. Practical for demonstrations. Made from a minimum of 75% recycled PMMA.



SOCKET FOR SAMPLING

A sampling port on the front of the fume hood allows you to quickly and reliably check the saturation of your active charcoal filter using the pump and reagent tubes

MANDATORY EQUIPMENT



CHEMICAL SENSOR (CLASS 1)

Automatic E-detect active charcoal filter saturation detector (mandatory and only available for class 1), to be selected from the following compounds: ammonia vapors, corrosive+organic vapors, formaldehyde vapors or organic vapors. Ref. SATAMM, SATCORG, SATFOR, SATORG.



ACTIVE CHARCOAL FILTERS AND HEPA H14 FILTERS

Your Labopur NFX15-211 fume hood must be equipped with one (class 2) or two identical (class 1) active charcoal molecular filters per filtration column. It can also be equipped with an Hepa H14 filter. For use with Hepa filter only: choose a class 2 fume hood.

OPTIONAL EQUIPMENT



MELAMINE WORKTOP

Made of high density melamine, it offers excellent resistance to chemical attack. A glass worktop is also available if acids are used.



CONTAINMENT SUMP

Under each work surface there is a containment sump that fits under the hood. In the event of a leak or spillage, the liquids handled are collected in this way. To clean the containment sump, simply lift and remove the worktop and use a suitable absorbent. This tray is supplied with the worktop of your choice.



GLASS WORKTOP

Made of high density tempered glass, it offers excellent resistance to chemical attack.



LIGHTING

We propose to integrate an LED light in the enclosure so that it does not hinder your visibility. IP65 - 10W - 4200K - 710Im



MANUAL PUMP AND REACTIVE TUBES

Think about your health. Check the saturation of your active charcoal filter with a pump and reagent tubes (required for class 2 only). We can offer you a wide range of reagent tubes according to your products, just ask us!

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designs at any time without

















PRESENTATION OF THE RANGE (CLASS 1)

ADVANTAGES

Optimal protection for the user:

- Fume hoods according to NF X 15-211 May 2009 by French laboratories and control bodies.
- CE certification. Electrical assembly complies with the requirements of the low voltage directive 2014/35/EU and EMC Directive 2014/30/EU.
- Equipment conforms to the requirements of IEC61010-1.
- Containment of vapors and powders in the handling enclosure, then elimination of these when they pass through the molecular filter or the HEPA particulate filter.
- Automatic filter saturation detector (several choices of detectable molecules must be ordered with the fume hood).
- Main active charcoal filter + safety reserve active charcoal filter (several choices of detectable molecule, must be ordered with the fume hood).
- FILTRALARME 5 interface with touch screen for ergonomic operational management of the fume hood.
- 5 languages available: French English German Spanish Italian
- · Automatic air flow regulation.
- · Air flow and hour meter displayed simultaneously.
- The date of installation of the filters and their types is indicated and visible during the operation of the fume hood.
- · Main switch with overvoltage fuse.
- Quiet electric fans (excluding airflow) that meet CE specifications.
- Control window on the front of the fume hood showing immediately the presence and quality of the filter used.

Time and energy savings:

- Fume hoods delivered ready to use (no assembly required), to be connected only to the electrical network.
- No connection or evacuation required, no civil engineering solution (as the hood is equipped with a filter).
- · No need to heat or cool the air in the room as the air is recirculated.

Comfortable to use:

- Reinforced transparent walls on all sides provide optimal lighting of the work surface and immediate visualization of the products handled.
- Ergonomically designed working opening for safe and easy handling in the enclosure (3 possible choices depending on the size of the hoods)
- Covers allowing the introduction of the equipment's fluid supply cables.
- Very low noise level of the fans (excluding air flow), thus allowing increased concentration during work.
- Easy replacement of the active charcoal filter, only a few minutes are required.
- Our equipment is equipped with transparent translucent walls that are now 100% recyclable.

TECHNICAL CHARACTERISTICS

- · Construction in 15/10th steel.
- Epoxy paint, white RAL 9010, blue 5015, highly resistant to chemicals
- · Reinforced glass walls in 6 mm thick PMMA.
- · Average air speed at the front of the unit: 0.5 m/s
- Voltage: 220-240 volts
- Electrical power: 35 W per ventilation column
- · Intensity: 0.35 A
- · Fan noise level (excluding air flow): 60 dB(A)
- Flow rate: 180 m3/h

STANDARD EQUIPMENT

- · Touch screen.
- 4 covers for supply and fluid passages (removable, it is recommended to leave them in place and to make notches in them in order to pass the cables through).
- Automatic air flow control and maintenance (touch screen).
- · Hour meter (touch screen).
- · Manual sampling available.
- 4 transparent reinforced walls.
- · Filter viewing window.
- FILTRALARME 5 interface with touch screen for ergonomic and operational management of the hood.
- · Automatic air flow regulation.
- 5 languages available: French English German Spanish Italian
- · Airflow and hour meter displayed simultaneously
- Indicators of the date of installation of the filters and their types.

These hoods must be equipped with at least two active charcoal filters.

MANDATORY OPTION

 Automatic E-detect active charcoal filter saturation detector (mandatory for class 1): to be selected from the following compounds: corrosive vapors ref. SATCOR, organic vapors ref. SATORG, formaldehyde vapors ref. SATFOR or ammonia vapors ref. SATAMM.

OPTIONS

- Removable containment sump with the worktop to collect liquids in case of accidental spills + melamine or laminated glass worktop (highly recommended for use with acids).
- LED lighting positioned so as not to impede your visibility IP65 -10W - 4200K - 710lm ref. LUMI
- Manual pump to determine the saturation of the filters: ref. PMAF.
- · Reagent tubes:
- Ref. TROR: Set of 10 «organic» reagent tubes
- Ref. TRAC: Set of 10 «corrosive» reagent tubes
- Ref. TROA: Set of 5 «organic» and 5 «corrosive» reagent tubes.







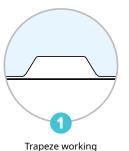






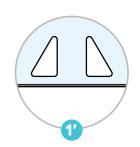


▲ H092Z+H2C + BV09 + 2x (SH200 + HEP200) + 4 x (CORG201) + SATORG





Filter holder and HEPA filter (otpion)



2 hands working opening



Easy to replace filters



Melamine or glass tempered worktop



Removable containment sump



Touch screen Hour meter Air flow controller



Automatic E-detect active charcoal filter saturation detector













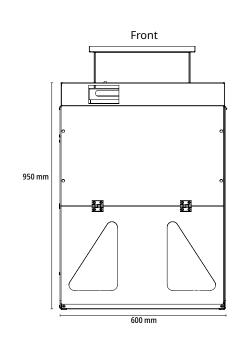


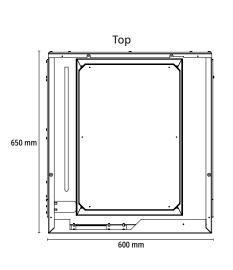


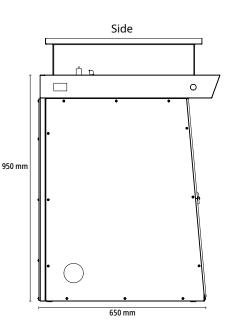


▲ H061D+2C + BV06 + 2xCORG201 + SATORG





















Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

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	H061D+2C		
P/N & Working opening type			
That nothing opening type	H061Z+2C		
	Trapeze L: 400mm, H: 150mm		
External dimensions W x D x H (mm)	600 x 650 x950		
Internal dimensions W x D x H (mm)	545 x 505 x 735		
Weight (kg)	41		
Number of engines	1		
For liquid use only, to be chosen (mandatory) (1): prEN 17242: A/2/1 class	<u>&</u>		
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 kg) E-DETECT: SATORG		
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 kg) E-DETECT: SATCORG		
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 kg) E-DETECT: SATFOR		
Active charcoal filter(s) for ammonia vapors	2 x AMM 200 (24 kg) E-DETECT: SATAMM		
Additional accessories			
Containment sump + HPL work-top	BB06 (10 kg)		
Containment sump + Tempered glass work-top	BV06 (15 kg)		
Integrated outdoor light	LUMI (1 kg)		
Tubular table on 4 feet	TTF06 (9 kg)		
Tubular roller table (on castors)	TTR06 (10 kg)		
Monobloc rolling table with storage shelf	TR06 (28 kg)		
Table / trolley cabinet	TA06 (32 kg)		

(1) All filters must be of the same type





CAR200 box

















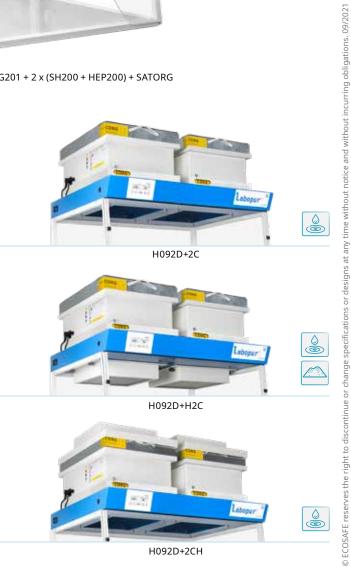


▲ H092Z+H2C + BV09 + 4 x CORG201 + 2 x (SH200 + HEP200) + SATORG



H091D+2C





H092D+2CH













Fume hoods, filtering cabinets - Ventilation

Flammable cabinets

and Multirisk









H091D+2C			H092D+2C	H092D+H2C	H092D+2CH
			H092Z+2C	H092Z+H2C	H092Z+2CH
			Trapeze		L: 400mm, H: 180mm
		900 x 75	0 x 1160		
		845 x 70	00 x 935		
		6	7		
	1			2	
<u>(S)</u>				X	X
2 x ORG20	0 (22 kg) E-DETE	CT: SATORG	4 x ORG200 (44 kg) E-DETECT: SATORG		
2 x CORG20	1 (24 kg) E-DETE	CT: SATCORG	4 x CORG201 (48kg) E-DETECT: SATCORG		
2 x FOR20	0 (24 kg) E-DETE	CT: SATFOR	4 x FOR200 (48 kg) E-DETECT: SATFOR		
2 x AMM 20	0 (24 kg) E-DETE	CT: SATAMM	4 x AMM 200 (48 kg) E-DETECT: SATAMM		
\times \times \times		X			
	-			2 x HEP200 (4 kg)	
	-			2 x SH200 (8 kg)	
	-		4 x ORG20	0 (44 kg) E-DETEC	T: SATORG
	-		4 x CORG201 (48kg) E-DETECT: SATCORG		
	-		4 x FOR200 (48 kg) E-DETECT: SATFOR		
-		4 x AMM 200 (48 kg) E-DETECT: SATAMM			
BB09 (11 kg)					
BV09 (16 kg)					
LUMI (1 kg)					
TTF09 (12 kg)					
TTR09 (13 kg)					
		TR09 (37 kg)		
TA09 (43 kg)					
	2 x CORG20 2 x FOR20	1 2 x ORG200 (22 kg) E-DETE 2 x CORG201 (24 kg) E-DETE 2 x FOR200 (24 kg) E-DETE	900 x 75 845 x 70 6 1 2 x ORG200 (22 kg) E-DETECT: SATORG 2 x CORG201 (24 kg) E-DETECT: SATCORG 2 x FOR200 (24 kg) E-DETECT: SATAMM	### HO92Z+2C Trapeze	H092Z+2C Trapeze 900 x 750 x 1160 845 x 700 x 935 67 1 2 2 x ORG200 (22 kg) E-DETECT: SATORG 2 x CORG201 (24 kg) E-DETECT: SATCORG 2 x FOR200 (24 kg) E-DETECT: SATFOR 4 x FOR200 (48 kg) E-DETECC 2 x AMM 200 (24 kg) E-DETECT: SATFOR 4 x FOR200 (48 kg) E-DETECC 4 x FOR200 (48 kg) E-DETECC 4 x FOR200 (48 kg) E-DETECC 5 4 x FOR200 (48 kg) E-DETECC 6 4 x CORG201 (48 kg) E-DETECC 7 4 x FOR200 (48 kg) E-DETECC 8 4 x FOR200 (48 kg) E-DETECC 9 4 x FOR200 (48 kg) E-DETECC 1 4 x FOR200 (48 kg) E-DETECCC 1 4 x FOR200 (48 kg) E-DETECCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

















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▲ H122D+H2C + BV12 + 4 x CORG201 + 2 x (SH200 + HEP200) + SATORG



H121D+2C





H122D+2CH

External dimensions W x D x H (mm)

Internal dimensions W x D x H (mm)

(mandatory)

For liquid use only, to be chosen

prEN 17242: A/2/1 class

Active charcoal filter(s) for formaldehyde vapors

For powder + liquid use or liquid use references to be ordered together (2)

Active charcoal filter(s) for ammonia vapors

must be chosen from (1): prEN 17242: A/3/1 class

H14 Hepa filter(s) for powder handling (2)

Active charcoal filter(s) for organic vapors

Active charcoal filter(s) for formaldehyde vapors Active charcoal filter(s) for ammonia vapors

Containment sump + Tempered glass work-top

Hepa filter holder (2)

Additional accessories

Integrated outdoor light

Tubular table on 4 feet

Table / trolley cabinet

Tubular roller table (on castors)

Monobloc rolling table with storage shelf

Containment sump + HPL work-top

Active charcoal filter(s) for organic vapors

Weight (kg)

Number of engines



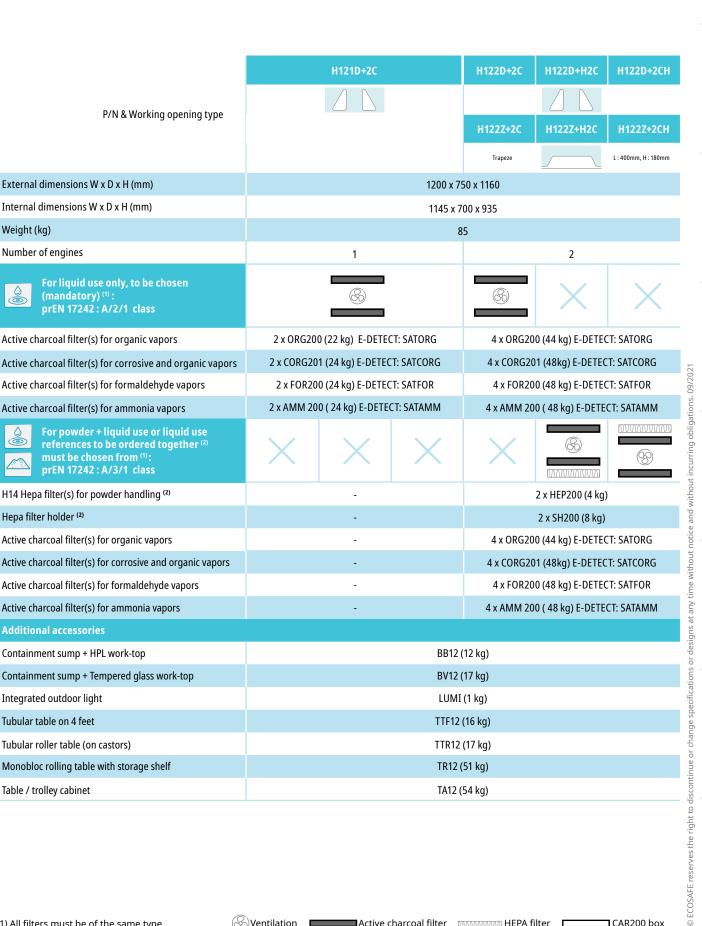








Fume hoods, filtering cabinets - Ventilation



LUMI (1 kg)

TTF12 (16 kg)

TTR12 (17 kg)

TR12 (51 kg)

TA12 (54 kg)

















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▲ H153Z+H2C + BV15 + 6 x CORG201 + 3 x (SH200 + HEP200) + SATORG















Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable

Corrosive

Toxic cabinets and Multirisk

and without incurring obligations. 09/2021

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H152D+2C H152D+H2C H152D+2CH H153D+2C H153D+H2C H153D+2CH H152Z+2C H152Z+H2C H152Z+2CH H153Z+2C H153Z+H2C H153Z+2CH P/N & Working opening type Trapeze L: 400mm, H: 180mm Trapeze L: 400mm, H: 180mm H153G+2C H153G+H2C H153G+2CH Large width L: 850mm, H: 180mm External dimensions W x D x H (mm) 1500 x 750 x 1160 Internal dimensions W x D x H (mm) 1445 x 700 x 935 Weight (kg) 102 Number of engines 2 3 For liquid use only, to be chosen (mandatory) (8) (8) prEN 17242: A/2/1 class 6 x ORG200 (66 kg) E-DETECT: SATORG Active charcoal filter(s) for organic vapors 4 x ORG200 (44 kg) E-DETECT: SATORG 4 x CORG201 (48kg) E-DETECT: SATCORG 6 x CORG201 (72 kg) E-DETECT: SATCORG Active charcoal filter(s) for corrosive and organic vapors Active charcoal filter(s) for formaldehyde vapors 4 x FOR200 (48 kg) E-DETECT: SATFOR 6x FOR200 (72 kg) E-DETECT: SATFOR 4 x AMM 200 (48 kg) E-DETECT: SATAMM Active charcoal filter(s) for ammonia vapors 6 x AMM 200 (72 kg) E-DETECT: SATAMM For powder + liquid use or liquid use references to be ordered together (2) (B) (8) must be chosen from (1): prEN 17242: A/3/1 class MAAAAAAAA H14 Hepa filter(s) for powder handling (2) 2 x HEP200 (4 kg) 3 x HEP200 (6 kg) Hepa filter holder (2) 2 x SH200 (8 kg) 3 x SH200 (12 kg) Active charcoal filter(s) for organic vapors 4 x ORG200 (44 kg) E-DETECT: SATORG 6 x ORG200 (66 kg) E-DETECT: SATORG Active charcoal filter(s) for corrosive and organic vapors 4 x CORG201 (48kg) E-DETECT: SATCORG 6 x CORG201 (72 kg) E-DETECT: SATCORG Active charcoal filter(s) for formaldehyde vapors 4 x FOR200 (48 kg) E-DETECT: SATFOR 6x FOR200 (72 kg) E-DETECT: SATFOR Active charcoal filter(s) for ammonia vapors 4 x AMM 200 (48 kg) E-DETECT: SATAMM 6 x AMM 200 (72 kg) E-DETECT: SATAMM **Additional accessories** Containment sump + HPL work-top BB15 (16 kg) Containment sump + Tempered glass work-top BV15 (21 kg) 2 x LUMI (2 kg) Integrated outdoor light Tubular table on 4 feet TTF15 (22 kg) Tubular roller table (on castors) TTR15 (23 kg) Monobloc rolling table with storage shelf TR15 (65 kg) Table / trolley cabinet TA15 (61 kg)

CLASS 1











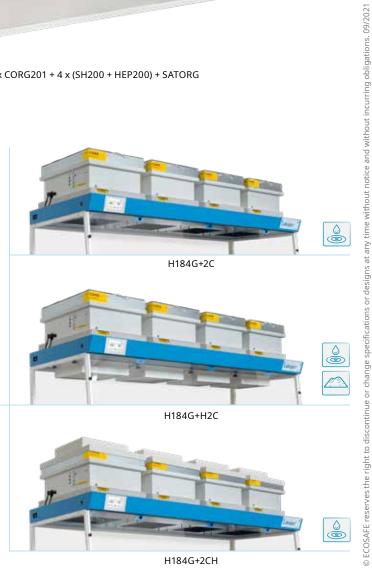




▲ H184G+H2C + BB18 + 8 x CORG201 + 4 x (SH200 + HEP200) + SATORG



H183G+2C



H184G+2CH













Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive cabinets

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	H183G+2C	H184G+2C H184G+H2C H184G+2CH		
P/N & Working opening type	Large width	L: 1150mm, H: 180mm		
External dimensions W x D x H (mm)	1800x 75	50 x 1240		
Internal dimensions W x D x H (mm)	1745 x 7	700 x 935		
Weight (kg)	1.	25		
Number of engines	3	4		
For liquid use only, to be chosen (mandatory) (1): prEN 17242: A/2/1 class	<u>(G)</u>	S X X		
Active charcoal filter(s) for organic vapors	6 x ORG200 (66 kg) E-DETECT: SATORG	8 x ORG200 (88 kg) E-DETECT: SATORG		
Active charcoal filter(s) for corrosive and organic vapors	6 x CORG201 (72 kg) E-DETECT: SATCORG	8 x CORG201 (96 kg) E-DETECT: SATCORG		
Active charcoal filter(s) for formaldehyde vapors	6x FOR200 (72 kg) E-DETECT: SATFOR	8 x FOR200 (96 kg) E-DETECT: SATFOR		
Active charcoal filter(s) for ammonia vapors	6 x AMM 200 (72 kg) E-DETECT: SATAMM	8 x AMM 200 (96 kg) E-DETECT: SATAMM		
For powder + liquid use or liquid use references to be ordered together (2) must be chosen from (1); prEN 17242 : A/3/1 class	X			
H14 Hepa filter(s) for powder handling (2)	3 x HEP200 (6 kg)	4 x HEP200 (8 kg)		
Hepa filter holder (2)	3 x SH200 (12 kg)	4 x SH200 (16 kg)		
Active charcoal filter(s) for organic vapors	6 x ORG200 (66 kg) E-DETECT: SATORG	8 x ORG200 (88 kg) E-DETECT: SATORG		
Active charcoal filter(s) for corrosive and organic vapors	6 x CORG201 (72 kg) E-DETECT: SATCORG	8 x CORG201 (96 kg) E-DETECT: SATCORG		
Active charcoal filter(s) for formaldehyde vapors	6x FOR200 (72 kg) E-DETECT: SATFOR	8 x FOR200 (96 kg) E-DETECT: SATFOR		
Active charcoal filter(s) for ammonia vapors	6 x AMM 200 (72 kg) E-DETECT: SATAMM	8 x AMM 200 (96 kg) E-DETECT: SATAMM		
Additional accessories				
Containment sump + HPL work-top BB018 (18 kg)				

BV18 (25 kg)

3 x LUMI (3 kg) TTF18 (24kg)

Containment sump + Tempered glass work-top

Integrated outdoor light

Tubular table on 4 feet

















PRESENTATION OF THE RANGE (CLASS 2)

ADVANTAGES

Optimal protection of the user:

- Fume hoods according to NF X 15-211 MAY 2009 by French laboratories and control bodies.
- CE certification. Electrical assembly complies with the requirements of the low voltage directive 2014/35/EU and EMC Directive 2014/30/EU.
- Equipment conforms to the requirements of IEC61010-1.
- Containment of vapors and powders in the handling enclosure and their elimination when they pass through the molecular filter or the HEPA filter.
- Front panel sampling port for quick and reliable control of filter saturation.
- Front indicator light to assure the user that the fume hood ventilation/filtration system is working properly.
- Quiet electric fans that meet CE specifications.
- Control window on the front of the unit shows immediately whether the filter is present and suitable for the job.

Time and energy savings:

- · Fume hoods delivered ready to use (no assembly required).
- No connection or evacuation required, no civil engineering solution (if the hood is equipped with a filter).
- No need to heat or cool the air in the room as the air is recirculating.

Comfortable to use :

- Reinforced transparent walls on all sides providing optimal lighting of the work surface and immediate visualization of the products being handled.
- Ergonomically designed working opening for safe and easy handling in the enclosure.
- · Covers for the insertion of the power supply cables.
- Very low noise level of the fans allowing increased concentration during work.
- Easy replacement of the active charcoal filter in just a few minutes.
- Our equipment is equipped with transparent translucent walls that are now 100% recyclable.

TECHNICAL CHARACTERISTICS

- Construction in 15/10th steel.
- Epoxy paint, white RAL 9010, blue 5015, highly resistant to chemicals
- Reinforced glass walls in 6mm thick PMMA.
- Average air speed at the front of the unit: 0.5 m/s
- · Voltage: 220-240 volts
- Electrical power: 35 W per ventilation column

- · Intensity: 0.35 A
- Fan noise level (excluding air flow): 60 dB(A)
- Flow rate: 180 m3/h

STANDARD EQUIPMENT

- · Touch screen
- 4 covers to supply fluid passages.
- · Automatic air flow control and maintenance
- · Hour meter
- Sampling port
- · 4 transparent reinforced walls.
- FILTRALARME 5 interface with touch screen for operational management of the hood.
- · Automatic air flow regulation
- 5 languages available: French English German Spanish Italian.
- · Airflow and hour meter displayed simultaneously
- Indicators for filter installation date and type
- Main switch

These hoods must be equipped with an active charcoal filter and/or a particulate filter and its support.

OPTIONS

- Removable containment sump with the worktop to collect liquids in case of accidental spills + melamine or laminated glass worktop (highly recommended for use with acids).
- \cdot LED lighting positioned so as not to impede your visibility IP65 10W 4200K $710lm\ ref.\ LUMI$
- Manual pump to determine the saturation of the filters: ref. PMAF.
- · Reagent tubes :
- Ref. TROR: Set of 10 «organic» reagent tubes
- Ref. TRAC: Set of 10 «corrosive» reagent tubes
- Ref. TROA: Set of 5 «organic» and 5 «corrosive» reagent tubes.















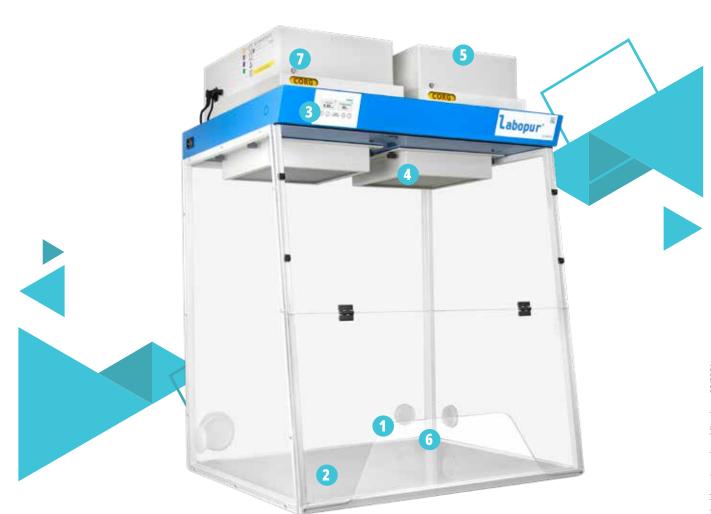
cabinets

Flammable cabinets

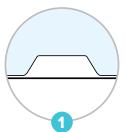
Corrosive

Toxic cabinets and Multirisk

Containment and cans



▲ H092Z+ BV09 + 2x(CORG201 + SH200 + HEP200)



Trapeze working opening



2 hands working opening



Melamine or glass tempered worktop



Touch screen Hour meter Air flow controller



Filter holder and HEPA filter (otpion)



Easy to replace filters



Removable containment sump



Socket for sampling

File cabinets Anti-fire equipments

Showers and firstaid equipments























H061D+ + BV06 + CORG201



H061D+ + BV06 + SH200 + HEP200 + CAR200



H061D+ + BV06 + CORG201 + SH200 + HEP200







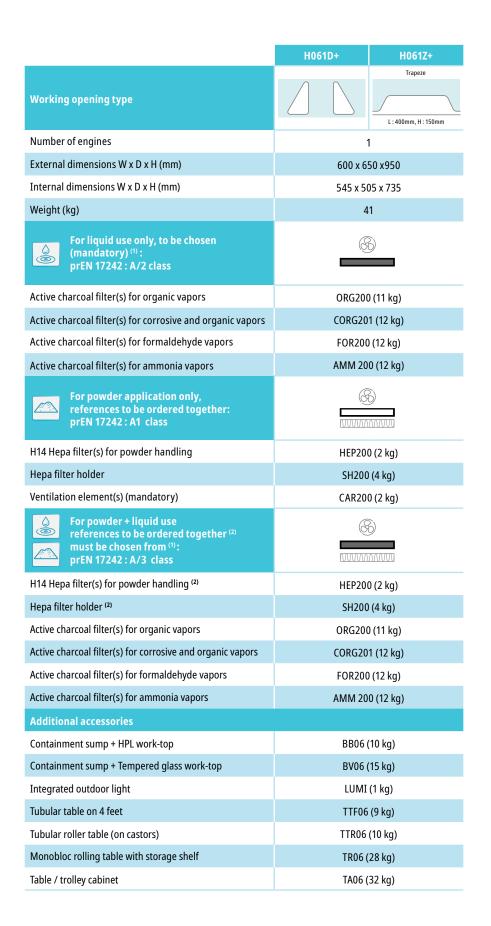






Fume hoods, filtering cabinets - Ventilation

Flammable



















▲ H092Z+ + BV09 + 2 x CORG201

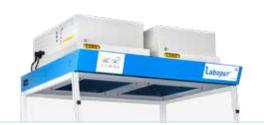




H091D+ + BV09 + SH200 + HEP200 + CAR200



H091D+ + BV09 + CORG201 + SH200 + HEP200



H092D+ + BV09 + 2 x CORG201



H092D+ + BV09 + 2 x(SH200 + HEP200 + CAR200)



H092D+ + BV09 + 2x(CORG201 + SH200 + HEP200)













Fume hoods, filtering cabinets - Ventilation

Lithium-ion cabinets

Flammable cabinets

Corrosive cabinets

	H091D+	H092D+	H092Z+		
Working opening type			Trapeze L: 400mm, H: 180mm		
Number of engines	1		2		
External dimensions W x D x H (mm)		900 x 750 x 1160			
Internal dimensions W x D x H (mm)		845 x 700 x 935			
Weight (kg)		67			
For liquid use only, to be chosen (mandatory) (1): prEN 17242: A/2 class	<u>(S)</u>	<u>(S)</u>	(S)		
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)		
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG	201 (24 kg)		
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)		
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM 2	200 (24 kg)		
For powder application only, references to be ordered together: prEN 17242 : A/1 class					
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP200 (4 kg)			
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)			
Ventilation element(s) (mandatory)	CAR200 (2 kg)	2 x CAR2	200 (4 kg)		
For powder + liquid use references to be ordered together (2) must be chosen from (1): prEN 17242: A/3 class					
H14 Hepa filter(s) for powder handling ⁽²⁾	HEP200 (2 kg)	2 x HEP2	200 (4 kg)		
Hepa filter holder ⁽²⁾	SH200 (4 kg)	2 x SH2	00 (8 kg)		
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)			
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM 2	200 (24 kg)		
Additional accessories :					
Containment sump + HPL work-top	BB09 (11 kg)				
Containment sump + Tempered glass work-top	BV09 (16 kg)				
Integrated outdoor light	LUMI (1 kg)				
Tubular table on 4 feet		TTF09 (12 kg)			
Tubular roller table (on castors)		TTR09 (13 kg)			
Monobloc rolling table with storage shelf		TR09 (37 kg)			
Table / trolley cabinet		TA09 (43 kg)			







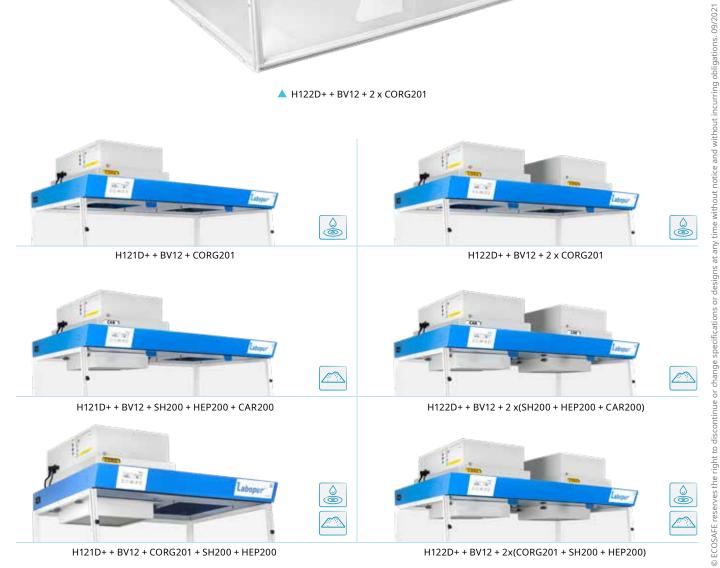








▲ H122D+ + BV12 + 2 x CORG201



H121D+ + BV12 + CORG201 + SH200 + HEP200

H122D+ + BV12 + 2x(CORG201 + SH200 + HEP200)

















	H121D+	H122D+	H122Z+			
Working opening type			Trapeze L: 400mm, H: 180mm			
Number of engines	1		2			
External dimensions W x D x H (mm)	1200 x 750 x 1160					
Internal dimensions W x D x H (mm)	1145 x 700 x 935					
Weight (kg)		85				
For liquid use only, to be chosen (mandatory) (1): prEN 17242: A/2 class	<u>(S)</u>		<u>(S)</u>			
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)			
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG2	201 (24 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM 2	200 (24 kg)			
For powder application only, references to be ordered together: prEN 17242: A/1 class						
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP2	200 (4 kg)			
Hepa filter holder	SH200 (4 kg)	2 x SH2	00 (8 kg)			
Ventilation element(s) (mandatory)	CAR200 (2 kg)	2 x CAR2	200 (4 kg)			
For powder + liquid use references to be ordered together (2) must be chosen from (1): prEN 17242: A/3 class						
H14 Hepa filter(s) for powder handling ⁽²⁾	HEP200 (2 kg)	2 x HEP2	200 (4 kg)			
Hepa filter holder ⁽²⁾	SH200 (4 kg)	2 x SH200 (8 kg)				
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)				
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG2	201 (24 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM 2	200 (24 kg)			
Additional accessories (1) ▼						
Containment sump + HPL work-top		BB12 (12 kg)				
Containment sump + Tempered glass work-top		BV12 (17 kg)				
Integrated outdoor light		LUMI (1 kg)				
Tubular table on 4 feet		TTF12 (16 kg)				
Tubular roller table (on castors)		TTR12 (17 kg)				
Monobloc rolling table with storage shelf	TR12 (51 kg)					
Table / trolley cabinet		TA12 (54 kg)				

CLASS 2















▲ H153Z+ + BV15 + 3 x CORG201













H153Z+ + BV15 + 3 x CORG201

H153Z+ + BV15 + 3 x (SH200 + HEP200 + CAR200)











Fume hoods, filtering cabinets - Ventilation

Lithium-ion cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

. A
* * *
MADE IN
EUROPE
XUX

	H152D+	H152Z+	H153D+	H153Z+	H153G+			
	0 0	Trapeze	0 0	Trapeze	Large width			
Working opening type								
Number of engines		L: 400mm, H: 180mm		L:400mm, H:180mm L:850mm, H:180mm				
Number of engines		2		3				
External dimensions W x D x H (mm)			1500 x 750 x 1160					
Internal dimensions W x D x H (mm)		1445 x 700 x 935						
Weight (kg)			102					
For liquid use only, to be chosen (mandatory) (1): prEN 17242: A/2 class	<u> </u>	<u>&</u>		<u>6</u> 6 6				
Active charcoal filter(s) for organic vapors	2 x ORG2	00 (22 kg)		3 x ORG200 (33 kg)				
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG	201 (24 kg)		3 x CORG201 (36 kg)				
Active charcoal filter(s) for formaldehyde vapors	2 x FOR2	00 (24 kg)		3 x FOR200 (36 kg)				
Active charcoal filter(s) for ammonia vapors	2 x AMM 2	200 (24 kg)		3 x AMM 200 (36 kg)				
For powder application only, references to be ordered together: prEN 17242 : A/1 class								
H14 Hepa filter(s) for powder handling	2 x HEP2	200 (4 kg)	3 x HEP200 (6 kg)					
Hepa filter holder	2 x SH2	00 (8 kg)	3 x SH200 (12 kg)					
Ventilation element(s) (mandatory)	2 x CAR2	200 (4 kg)		3 x CAR200 (6 kg)				
For powder + liquid use references to be ordered together (2) must be chosen from (1): prEN 17242 : A/3 class								
H14 Hepa filter(s) for powder handling ⁽²⁾	2 x HEP2	200 (4 kg)	3 x HEP200 (6 kg)					
Hepa filter holder ⁽²⁾	2 x SH2	00 (8 kg)	3 x SH200 (12 kg)					
Active charcoal filter(s) for organic vapors	2 x ORG2	00 (22 kg)		3 x ORG200 (33 kg)				
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG	201 (24 kg)		3 x CORG201 (36 kg)				
Active charcoal filter(s) for formaldehyde vapors	2 x FOR2	00 (24 kg)		3 x FOR200 (36 kg)				
Active charcoal filter(s) for ammonia vapors	2 x AMM 2	200 (24 kg)		3 x AMM 200 (36 kg)				
Additional accessories								
Containment sump + HPL work-top			BB15 (13 kg)					
Containment sump + Tempered glass work-top			BV15 (18 kg)					
Integrated outdoor light			2 x LUMI (1 kg)					
Tubular table on 4 feet			TTF15 (22 kg)					
Tubular roller table (on castors)			TTR15 (23 kg)					
Monobloc rolling table with storage shelf			TR15 (65 kg)					
Table / trolley cabinet			TA15 (61 kg)					

















▲ H184G+ + BB18 + 4 x CORG201



H183G+ + BB18 + 3 x CORG201



H184G+ + BB18 + 4 x CORG201

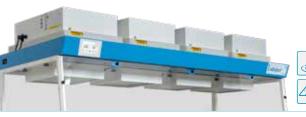


H183G+ + BB18 + 3 x (SH200 + HEP200 + CAR200)





H183G+ + BB18 + 3 x (CORG201 + SH200 + HEP200)



H184G+ + BB18 + 4 x (CORG201 + SH200 + HEP200)













Fume hoods, filtering cabinets - Ventilation

Flammable

Corrosive

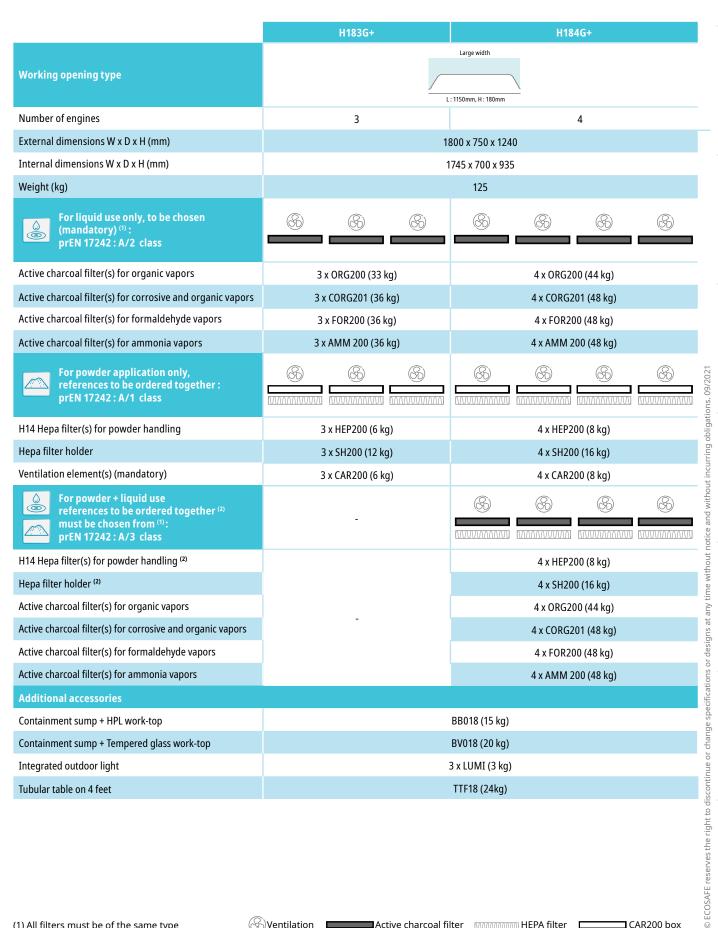
Toxic cabinets and Multirisk

Containment

Anti-fire equipments File cabinets

Showers and first equipments

+*+
MADE IN
EUROPE
LUKUFL
T + T













TUBULAR TABLE

P/N	Туре	Dimension H x W x D (mm)	Weight (kg)
TTF06	With feet	723 x 605 x 605	11
TTR06	With castors	800 x 675 x 685	12
TTF09	With feet	723 x 975 x 840	13
TTR09	With castors	800 x 975 x 840	14
TTF12	With feet	723 x 1275 x 840	14
TTR12	With castors	800 x 1275 x 840	15
TTF15	With feet	723 x 1575 x 840	16
TTR15	With castors	800 x 1575 x 840	17
TTF18	With feet	723 x 1875 x 840	18

- Construction in 15/10th steel, white epoxy paint RAL 9010
- Available with feet or swivel castors, 2 of which can be locked.











TABLE / TROLLEY CABINET

P/N	Dimension H x W x D (mm)	Weight (kg)	Retention (L)
TA06	800 x 615 x 630	39	13
TA09	800 x 915 x 780	51	28
TA12	800 x 1215 x 780	78	38
TA15	800 x 1520 x 780	86	48

- · Construction in 15/10th steel, epoxy paint white RAL 9010.
- 1 shelf adjustable in height.
- 1 removable Containment sump at the bottom.
- 2 hinged doors with automatic closing and key.
- Standardized warning labels.
- 4 swivel castors, 2 of which are lockable.
 - Ventilation hole.





TROLLEY

P/N	Dimension H x W x D (mm)	Weight (kg)
TR06	800 x 615 x 630	34
TR09	800 x 917 x 780	50
TR12	800 x 1217 x 780	58
TR15	800 x 1517 x 780	66

- · Construction in 15/10th steel.
- · White epoxy paint RAL 9010.
- 1 shelf adjustable in height (the depth of the shelf is equal to ¾ of the depth of the table).
- · 4 swivel castors, 2 of which are lockable.





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Showers and firstaid equipments











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FUME HOODS WITH EXTERNAL CONNECTION



▲ BH09D+ +BB09



▲ BH15Z+ + BB15 + CDV-A + 2 KRC

USE

These fume hoods are designed to be connected to a ventilation system(1) for the discharge of toxic and noxious fumes to the external of the building (use without active charcoal filter). It is imperative to add a ventilation box - model CDV-A (to be completed with 2 connection kits reference KRC or to be connected to a suitable extraction system).

ADVANTAGES

- Hoods delivered ready to use (no assembly required), to be connected only to the electrical network and to a fume extraction system.
- Transparent walls on all sides for optimal lighting of the work surface and immediate visualization of the products handled.
- Ergonomically designed working opening for safe and easy handling in the enclosure.
- Covers for the introduction of power and fluid supply cables.

TECHNICAL CHARACTERISTICS

- 15/10th steel construction.
- White epoxy paint RAL 9010, highly resistant to chemicals.
- 4 sides made of 6 mm thick glass (PMMA)
- 4 covers for power supply passage.

ADDITIONAL ACCESSORIES

- · Ventilation box.
- · Connection kit.
- · Melamine worktop.
- · Tempered glass worktop.
- · Removable containment sump.
- · External lighting.
- Fixed and rolling tables.

P/N	BH06D+	BH06Z+	BH09D+	BH09Z+	BH12D+	BH12Z+	BH15D+	BH15Z+	BH15G+	BH18Z+	BH18G+
Type of working opening	2 hands	Trapeze	2 hands	Trapeze	2 hands	Trapeze	2 hands	Tra- peze	Large width	Trapeze	Large width
External dimensions W x D x H (mm)	600 x 650 x 745 900 x 750 x 945		1200 x 7	750 x 945 1500 x 750 x 945		x 945	1800 x 750 x 1240				
Internal dimensions W x D x H (mm)	545 x 50	545 x 505 x 735 845 x 700 x 935		1145 x 7	00 x 935	x 935 1445 x 700 x 935		x 935	1745 x 700 x 1230		
Weight (kg)	4	1	67		8	5	102		125		
Additional accessories											
Containment sump + melamine worktop	BB06 (10 kg) BB09 (11 kg)		BB12 (12 kg)	BB15 (13 kg)		BB18 (15 kg)				
Containment sump + laminated glass worktop	BV06 (BV06 (15 kg) BV09 (16 kg)		BV12 (17 kg)	BV15 (18 kg)		kg)	BV18 (20 kg)		
Ventilation box	CDV-A (8 kg)										
Connection kit	2 x KRC (2 kg)										
External side lighting		LUD (Exterior light with deflector - left hand side)									













HANDLING AND STORAGE FILTRATION STATION - PMSF

HANDLE AND STORE YOUR HAZARDOUS PRODUCTS IN ONE PLACE

The safety cabinet/table is connected to ductless fume hood in order to benefit from the latter's ventilation/filtration system (connection kit KRPMSF). The vapors contained in the cabinet/table are thus extracted, purified as they pass through the active charcoal filter and then released into the atmosphere.

Your Handling and Storage Filter Station includes:

1. A DUCTLESS FUME HOOD

Tested and approved by independent laboratories to the new NF X 15-211 standard - May 2009 - Class 1 or Class 2

Depending on the dimensions of the fume hoods, you will find different configurations in terms of number of motors and type of working openings.

A reference corresponds to each configuration.

2. AN ACTIVE CHARCOAL FILTER

to be determined according to the products handled under the hood (mandatory).

- · ORG200 filter for organic vapors.
- Polyvalent filter CORG201 for organic and corrosive vapors.
- FOR200 filter for formaldehyde vapors.
- · AMM200 filter for ammonia vapors.

REMINDER: We also propose specific type of filters for specific applications. Please contact us.

Depending on the number of motors in the hood and the type of class (1 or 2), there may be several active charcoal filters (1 motor = 1 filter on class 2) (1 motor = 2 filters on class 1). It is also possible to add a particle filter if necessary.

3. ADDITIONAL ACCESSORIES

To be added to the hood

Compulsory: The hoods are bottomless, to be fitted with a Containment sump + melamine or laminated glass worktop.

The reference is to be determined according to the hood chosen and the worktop required.

Optional: We recommend to add an integrated exterior light. Depending on the chosen configuration, there can be 1 or 2 lights.

4. A SAFETY CABINET/TABLE

- 15/10th steel construction
- · White epoxy paint RAL 9010
- · Automatic locking of the hinged doors
- Standardized warning labels in accordance to ISO 3864, ISO 7010, NF X 08.003 and European Directive 92/58/EEC.
- · 1 height-adjustable shelf on a rack
- 1 removable containment sump at the bottom
- 4 swivel castors, 2 of which are lockable
- Top and bottom ventilation holes
- KRPMSF connection kit for connecting the cabinet to the hood.
- The reference of the table/cabinet is to be determined according to the chosen hood.



▲ PMSF: H061Z+H2C + TA06 + BB06 + 2 x CORG201 + SH200 + HEP200 + KRPMSF

In the end, you must therefore have a hood reference + a filter reference with its quantity + one or more complementary accessory references + a safety table/cabinet reference + the connection kit reference KRPMSF.

Fume hoods, filtering ets cabinets - Ventilation

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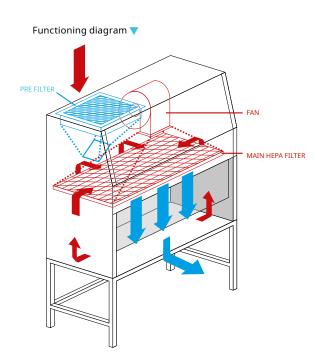
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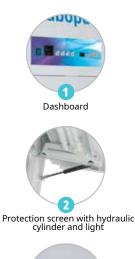




VERTICAL LAMINAR FLOW HOODS









PRESENTATION

Providing first class product protection, vertical laminar flow hoods are the instruments of choice when handling non-pathogenic biological samples, cell and tissue cultures in the pharmaceutical, electronics, optical and food industries. The air flow is automatically maintained at 0.40 m/s. 30% of the air is expelled from the HEPA exhaust filter and the remaining 70% of the HEPA filtered air is recycled through the slots on the sides and rear of the work chamber.

COMPLIANCE

- European Directive 2007/47/EC on medical devices.
- European Directive 2006/95/EC on electrical equipment.
- European Directive 93/98/EC on CE marking.
- European Directive 92/31/EC and 2004/108/EC on electromagnetic compatibility.
- Standards EN 61010-1, EN 61326-1, EN 61000-6-3.

ADVANTAGES

- · Low-noise fan with high light intensity
- Smooth walls, rounded corners and no welds; allowing easy cleaning and decontamination.
- White walls for glare-free illumination
- · Easy filter replacement.
- For short periods between uses, the airflow can be adjusted to medium speed, increasing filter life and reducing the time to reach clean room conditions to as little as 3 to 4 minutes.

TECHNICAL FEATURES

- Microprocessor control system with digital display for airflow speed.
- G14 pre-filter with 85% efficiency for particles >0.5 μ m and H14 HEPA filter with 99.999% efficiency for particles \geq 0.3 μ m.
- Automatic airflow compensation system to prevent filter clogging.
- Audible and visual alarm in case of airflow defect.
- · Cold rolled steel sheet hood with electrostatic powder coating.
- One-piece 304 stainless steel worktop.
- · 2 power sockets (2.5 A).
- Integrated low voltage lighting and > 800 lux 30W.
- Noise level below 60 dB(A).
- Power supply: 230 V, 50 Hz.
- Power consumption: 760 W.
- Motor flow rate: 2.150 m3/h.

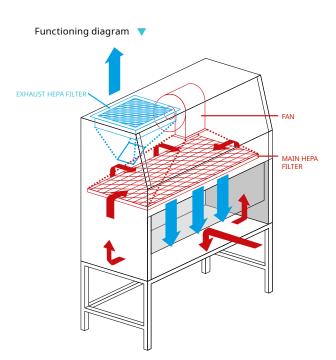
OPTIONS

- · Spare HEPA filter
- · Spare pre-filter
- Front wall with integrated UV lamp (FLV09: Length 45 cm, power 15W and wavelength 254 nm - FLV12: Length 90 cm, power 30W and wavelength 254 nm)
- Tubular table TH09 and/or TH12 Gas tap Vacuum tap

P/N	FLV09	FLV12
External dimensions (H x W x D) mm	1345 x 1060 x 795	1345 x 1360 x 795
Internal dimensions (H x W x D) mm	620 x 890 x 630	620 x 1195 x 630
External dimensionsOpening dimensions (H x W) mm	200 x 888	200 x 1190
Work surface dimensions (W x D) mm	885 x 630	1190 x 630
Shipping dimensions (H x W x D) mm	1500 x 1150 x 850	1500 x 1450 x 850
Net weight (kg)	165	185
Gross weight (kg)	190	218



MICROBIOLOGICAL SAFETY CABINETS - CLASS II









Protection screen with hydraulic cylinder and light



Electric Plug

PRESENTATION

Providing first class protection for the operator, the environment and the product, Class II microbiological safety cabinets are the instruments of choice when handling hazardous micro-organisms. The airflow is automatically maintained at 0.45m/s. 30% of the air in the work area is expelled from the exhaust HEPA filter and the remaining 70% of the HEPA filtered air is recirculated through the work area. This cycle repeats continuously.

COMPLIANCE

- European Directive 2007/47/EC on medical devices.
- European Directive 2006/95/EC on electrical equipment.
- European Directive 93/68/EC on CE marking.
- European Directive 92/31/EC and 2004/108/EC on electromagnetic compatibility.
- · Certified EN 12469.

ADVANTAGES

- · Low-noise fan with high light intensity.
- · Smooth walls, rounded corners and no welds; allowing easy cleaning and decontamination.
- · White walls for glare-free illumination.
- Ergonomic armrest for long periods of handling.
- · Electronics compartment located external the contaminated
- Easy replacement of HEPA filters by trained personnel.

TECHNICAL FEATURES

- · Microprocessor control system with digital display for airflow
- Two H14 HEPA filters with 99.999% efficiency for particles ≥ 0.3µm.
- Automatic airflow compensation system to prevent filter clogging.
- · On-off switch with lock.
- · Alarms for: power failure, control system failure, open window, low and high airflow speed, clogged filters.
- Airtight seal by means of a cylinder on the window.
- Cold-rolled sheet steel cabinet, 2 mm epoxy polyester paint.
- · Removable worktop in 3 parts, in stainless steel 304.
- · 2 power sockets (2.5 A).
- Integrated low voltage lighting and > 1.000 lux 55W.
- · Noise level below 60 dB(A)
- · Power supply: 230 V, 50 Hz.
- · Power consumption: 1.860 W.

OPTIONS

- · Replacement HEPA main and exhaust filters.
- · Front wall with integrated UV lamp (length 90 cm, power 30W and wavelength 254 nm).
- TH12 tube table Gas tap Vacuum tap.

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PSM12
1400 x 1360 x 795
650 x 1190 x 600
185 x 1190
1190 x 600
1540 x 1450 x 850
220
257













BENCHTOP OR WALL-MOUNTED CABINETS WITH FILTERING VENTILATION



▲ AF10+ + CORGFC

Specialised activated carbon filter



Perforated shelves adjustable in height







removable containment sump

USE

This cabinet intended for the storage of dangerous products in the laboratory can either be fixed to the wall at 2 points or placed on a bench

COMPLIANCE

- Standardized pictograms complying with ISO 3864, ISO 7010 and NF X08.003 standards and European directive 92/58/EEC.
- Electric fan complies with CE specifications.

ADVANTAGES

- Possibility of separation by family of dangerous products in accordance with the Public Health Code.
- · Self-contained cabinets ensuring your safety.
- · Elimination of hazardous vapors.
- No connection or evacuation required, solution without civil engineering.
- · Immediate visualization of stored products.
- High efficiency activated carbon filter specialized and treated according to the stored products tested to the NF X 15-211 standard.
- Very easy to replace the activated carbon filter.
- Perforated steel shelves adjustable in height at 50 mm increments, allowing liquids to drain in the event of accidental spillage.
- · Removable steel retention trays for easy cleaning.
- · JF10D absorbent mat.

TECHNICAL CHARACTERISTICS

- 12/10th steel construction; White epoxy paint RAL 9010.
- Storage in 2 separate compartments (ref. AF10+):
- 2 compartments for "chemical products": Sliding polycarbonate glass doors; Lockable; 2 perforated shelves adjustable in height on racks; 2 removable retention trays in the lower part.
- "Ventilation/filtration" compartment: Silent electric fan, 43 dB(A) (excluding air flow), 220-240 volts 20 watt 0.1 A flow rate 86 m3/h IP54 protection.

OPTIONS

 Activated carbon filters: The cabinets are delivered without active carbon filter. You need to select one from the table below based on the type of products you store.



⋖AF11

This cabinet is also available without a ventilation/filtration system, with a single compartment for chemicals (Reference: AF11).

To be	P/ Filte Polyvalent ⁽¹⁾	N ring ventila Organic	ation Formaldehyde	Description	Dimensions H x W x D (mm)	Number of shelves	Number of containment sump	Storage capacity storage in 1L or 2.5L bottles	Load per shelf	Weight (kg)
connected	Polyvalent	Organic	Formaldenyde		External					
AF10+ + CARFC	AF10+ + CORGFC	AF10+ + ORGFC	AF10+ + FORFC	Cabinet with filtration system	775 x 800 x 325 Internal (2x) 500 x 360 x 275	2	2	8 or 4	20	50
AF11	-	-	-	Cabinet without filtration system	External 575 x 800 x 355 Internal (2x) 500 x 360 x 275	2	2	8 or 4	20	35

NFX CLASSE 2









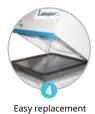


MINI-HOODS WITH AIR RECIRCULATION labopur®











COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested and approved to NF X 15-211 - May 2009.
- · Electric fan conforms to CE specifications.

ADVANTAGES

- · Labopur® technology.
- · Easily placed on a bench or workbench.
- Containment of vapors in the handling chamber and elimination of these vapors when they pass through the active charcoal filter.
- · Ventilation system operation indicator light
- Window for checking the presence of the filter adapted to your needs.
- High efficiency active charcoal filter specialised and treated according to the products stored, tested to standard NF X 15-211
 May 2009.
- Anti-dust filter, 92% efficiency against particles > 3 μm.
- · Easy replacement of the active charcoal filter.
- Hour meter permanently indicating the total mini-hood usage duration. After programming, every 60 hours, an acoustic signal indicates that the active charcoal filter should be checked for saturation.
- Built-in containment sump for the recovery of liquids in case of spillage.
- No connection or draining required, no civil engineering solution (if used with active charcoal filter).
- FILTRALARME 5 interface with touch screen for ergonomic operational management of the fume hood.
- 5 languages available: French English German Spanish Italian
- Automatic air flow regulation.
- · Air flow and hour meter displayed simultaneously.

- The date of installation of the filters and their types is indicated and visible during the operation of the fume hood.
- Delivered ready to use (no assembly needed), simply connect to the electrical grid.
- Adjustable legs for levelling.

TECHNICAL CHARACTERISTICS

- 12/10th steel construction.
- · White RAL 9010 and blue RAL 5015 epoxy paint.
- Silent electric fan: 220-240 volts 27 W 0.1 A 57 dB(A) (excluding air flow) flow rate: 170 m3/hour
- PMMA side walls and ergonomic hand passages for safe and easy handling in the enclosure.
- Hinged front panel with total opening for full access to the interior of the hood.

OPTIONS

- Active charcoal filter: The mini-hood is delivered without active charcoal filter. You must select one from the table below depending on the type of products you are handling.
- · Element for use without active charcoal filter.
- Control of filter obsolescence by REAGENT TUBES: Control port on the side of the cabinet - Port for the introduction of specialised reagent tubes - Use of a manual pump - Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.

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REMINDER: We also propose specific type of filters for specific applications. Please contact us.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Weight (kg)
H70+	Mini recirculating air hood (delivered without filter)	605 x 505 x 485	410 x 455 x 445	25
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	-	8
CORG51	Multi-purpose active charcoal filter(1) for organic and corrosive vapors	70 x 390 x 390	-	9
FOR50	Active charcoal filter for Formaldehyde vapors	70 x 390 x 390	-	9
PMAF	Manual pump	-	-	0,4
TROR	10 "organic" test tubes	-	-	0,1
TRAC	10 "corrosive" test tubes	-	-	0,1
TROA	5 "organic" and 5 "corrosive" test tubes	-	-	0,1

(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents.













Fume hoods, filtering

cabinets - Ventilation

cabinets

VENTILATED CABINETS FOR EXTERNAL CONNECTION











AF44+XT

TECHNICAL DATA

Storage compartment(s):

- 15/10th steel construction, double-walled doors
- · Large, lockable polycarbonate glass door(s).
- White RAL 9010 and blue RAL 5015 polyester paint.
- · Height-adjustable perforated shelves.

Roof ventilation Ø 100mm

«Ventilation/filtration» compartment:

Silent fan: CE 220-240 volts - 50 Hz; flow rate 202 m3/hour; 0.2 A; 70 watts; sound level 49 dB(A) (excluding airflow) with plug and cable.

P/N		AF2+XT	AF22+XT	AF42+XT	AF43+XT	AF44+XT		
External dimensions	H x W x D (mm)	2020 x 800 x 650	2020 x 800 x 650	2020 x 1600 x 650	2020 x 1600 x 650	2020 x 1600 x 650		
Internal dimensions	H x W x D (mm)	1660 x 780 x 500	1660 x (2x380) x 500	1660 x (2x780) x 500	1660 x (1x780 + 2x380) x 500	1660 x (4x380) x 500		
Compartn	nents	1	2	2	3	4		
Shelve	es	4	8 halves	8	4+8 halves	16 halves		
Retention	bin(s)	1	2	2	3	4		
Ctorago capacity (I)	with 4 shelves	140	120	280	260	240		
Storage capacity (L)	with 5 shelves	180	150	360	330	360		
Weight (Weight (kg)		150	280	290	300		
Connecting element fo	r use without filter		CAR200 (3 kg) (include)					
Ø 100mm coni	nection kit	KRC (include) solid roof with ø 100mm outlet						

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Flammable cabinets

Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments File cabinets















FILTERING VENTILATION SAFETY CABINET





Touch screen



Sampling port test of the filter saturation



Active charcoal



Perforated shelves adjustable in height



Control window



Absorbent mat in the Containment sump

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested to NF X 15-211 - May 2009.
- Standardized warning labels in accordance with ISO 3864 standard, and with European directive 92/58/EEC.
- Compliant with the public health code (articles R5132-66 and R5132-68).
- Electrical assembly complies with the requirements of the low voltage directive 2014/35/EU and EMC Directive 2014/30/EU.
- Equipment conforms to the requirements of IEC61010-1.

ADVANTAGES

- Labopur® technology.
- Cabinets delivered ready to use.
- · Self-contained cabinets for your safety.
- · Elimination of hazardous fumes.
- No connection or evacuation required, no civil engineering solution.
- · Immediate visibility of stored products.
- Perforated shelves to allow liquids to drain in the event of an accidental spill.
- Window for checking the presence of the filter adapted to your needs.
- High efficiency active charcoal filter specialised and treated according to the products stored and tested to NF X 15-211 standard.
- Anti-dust filter, 92% efficiency of particles > 3 μ m.
- Easy replacement of the active charcoal filter.
- FILTRALARME 5 interface with touch screen for ergonomic operational management of the fume hood.
- 5 languages available: French English German Spanish -Italian.
- Automatic air flow regulation.
- · Air flow and hour meter displayed simultaneously.

• The date of installation of the filters and their types is indicated and visible during the operation of the fume hood.

TECHNICAL CHARACTERISTICS

Storage compartment(s):

- 15/10th steel construction, double-walled doors (AF1C: melamine frame)
- · Large polycarbonate glass door(s) with key lock.
- White RAL 9010 and blue RAL 5015 polyester paint.
- · Height-adjustable perforated shelves.
- Ventilation holes.

"Ventilation/filtration" compartment:

Silent fan: CE 220-240 volts - 50 Hz; 202 m3/hour flow rate; 0.2
A; 70 watts; 49 dB(A) sound level (excluding air flow) with plug
and cable.

OPTIONS (see also table on next page)

Additional shelves

Active charcoal filters:

The cabinets are delivered without active charcoal filter. You must select one from the table at the bottom of the next page according to the type of products you store and change them at least once a year.

Filter saturation level control by REACTIVE TUBES:

- · Control port on the front of the cabinet
- · Hole for the introduction of specialised reagent tubes
- Use of a manual pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.

AF2+

AF22+

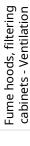












cabinets

Flammable

Corrosive

Toxic cabinets and Multirisk

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pr**EN** 17242





AF42+





Model compa active char		AF1+	AF2+	AF22+	AF42+	AF43+	AF44+
Model « HEPA H14 ready » compatible with an H14 HEPA filter and / or active charcoal filter		AF1C1		-	-	-	-
External dimer	nsions (mm)	2020x 800 x 650	2020 x 800 x 650	2020 x 800 x 650	2020 x 1600 x 650	2020 x 1600 x 650	2020 x 1600 x 650
Internal dimensions H x L x P (mm)		1500 x 760 x 500	1660 x 780 x 500	1660 x (2x380) x 500	1660 x (2x780) x 500	1660 x (1x780 + 2x380) x 500	1660 x (4x380) x 500
Compart	ments	1	1	2	2	3	4
Shelv	res	4	4	8 halves	8	4+8 halves	16 halves
Containme	nt sumps	1	1	2	2	3	4
C+ (1)	with 4 shelves	140	140	120	280	260	240
Storage (L)	with 5 shelves	180	180	150	360	330	360
Weight (kg)		115	140	150	280	290	300

Active charcoal filter for organic vapors	ORG200 (16 kg)		
Multi-purpose active charcoal filter for organic and corrosive vapors		CORG201 (15 kg)	
Active charcoal Filter for formaldehyde vapors		FOR200 (12 kg)	
Kit for using without an active charcoal filter		CAR200 (6 kg)	
HEPA filter holder H14	SH200		
H14 HEPA filter for powder handling	HEP200		

REMINDER: We also propose specific type of filters for specific applications. Please contact us.

Manual pump	PMAF					
10 «organic» test tubes	TROR					
10 «corrosive» test tubes	TRAC					
5 «organic» test tubes and 5 «corrosive» test tubes	TROA					
Additional shelf (H25 x W775x D500 mm) for AF1+ ; AF1+H ; AF2+ ; AF2+H ; AF42+ ; AF43+	ESAF2X - ESAF2X -				-	
Additional half shelf (H25 x W370 x D500 mm) for AF22+ ; AF43+ ; AF44+	-	-	ESAF2-2X	-	ESAF2-2X	ESAF2-2X

WARNING: The active charcoal filter must be replaced at least once a year.

N.B.1: The ORG200, CORG201 and FOR200 filters are not suitable for enclosures referenced AF2C, AF22C, AF42C, AF43C, AF44C, AF1C.. They are only suitable for cabinets with the reference numbers: AF2+, AF22+, AF42+, AF44+, AF4+, AF1+.

N.B.2: Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

N.B.3: CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents.

NFX















FILTERING VENTILATION SECURE CABINETS







▲ AFP5-2X + CORG51



▲ AFP3X + CORG51

- COMPLIANCE
 Adsorption capacity of active charcoal filters and filtration system tested to NF X 15-211 May 2009.
- Complies to articles R.5132-66 and R.5132-68 of the Public Health Code
- · Complies with recommendation for risk prevention and safety.
- Standardized warning labels in accordance with ISO 3864 standard, and with European Directive 92/58/EEC.
- · Electric fan conforms to CE specifications.

ADVANTAGES

- labopur® technology.
- · Available in 2 versions: Steel doors or glass doors.
- Self-contained cabinets for your safety.
- · Elimination of dangerous vapors.
- No connection or evacuation required, no civil engineering solution.
- · Ventilation system operation indicator light.
- Window for checking the presence of the filter adapted to your people.
- Active charcoal filter for organic vapors or high efficiency polyvalent active charcoal filter(1) tested to NFX 15-211 standard.
- Anti-dust filter, 92% efficiency against particles > 3 μ m.
- · Easy replacement of the active charcoal filter.
- Hour meter permanently indicating the total duration of use of the cabinet. After programming, every 60 hours, an audible

signal indicates that the active charcoal filter needs to be checked for saturation.

TECHNICAL CHARACTERISTICS

- · 10/10 steel construction.
- · White epoxy paint RAL 9010.
- Standardized warning labels for «Flammable», «Corrosive», «Toxic» or «Harmful» products.
- · Height-adjustable containment shelves on rack.
- Removable Containment sumps in the lower part, height 100 mm.
- Independent storage compartments for AFP5-2X and AF5-2X models.
- · Hinged doors with key lock.
- Top and bottom ventilation:
- Air inlet with double grille at the bottom of the doors.
- Roof outlet Ø 100 mm with grilles.

ventilation box:

- Silent fan: CE 220-240 volts 50 Hz; 86 m3/hour flow rate; 0.1 A, 20 watt; 43 dB(A) sound level (excluding air flow) with plug and electric cable - IP54 protection.
- Casing to be equipped with a molecular filter ORG50 or CORG51 for indoor discharge, or with a kit for use without active charcoal filter (CAR50) for outdoor connection.













Fume hoods, filtering cabinets - Ventilation

OPTIONS

- · Additional shelf EE1 or EE2.
- · Active charcoal filters: The cabinets are delivered without active charcoal filters. You must select one from the table below depending on the type of products you are storing. See table.
- PVC containment shelf and containment sump for corrosive products. SEPVC, SBPVC.
- Sampling port in the front.
- Sampling port for the introduction of specialized reagent tubes.
- Use of a manual pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.

Absorbent mats to be placed at the bottom of the containment sump (supplied in packs of 10 sheets reference JF10D).

Filter saturation level control by REACTIVE TUBES:

CABINETS TO BE FITTED WITH A FILTER

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Weight (kg)
AFP3X	Filtering ventilation cabinet with steel door	Ext. 2135 x 560 x 545 Int. 1795 x 555 x 480	150	41	3	75
AF3X	Filtering ventilation cabinet with glass door	Ext. 2135 x 560 x 545 Int. 1795 x 555 x 480	150	41	3	75
AFP5-2X	Filtering ventilation cabinet with steel doors	Ext. 2135 x 1110 x 545 Int. (2x) 1795 x 555 x 480	(2x) 140	(2x) 41	6	130
AF5-2X	Filtering ventilation cabinet with glass doors	Ext. 2135 x 1110 x 545 Int. (2x) 1795 x 555 x 480	(2x) 140	(2x) 41	6	130

ACTIVE CHARCOAL FILTER AND ACCESSORIES

P/N	Description	Dimensions H x W x D (mm)	Containment capacity (L)		Weight (kg)
CORG51	Multi-purpose active charcoal filter (1)	70 x 390 x 390	-		9
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	-	To be changed at least once a year.	8
FOR50	Active Charcoal Filter for formaldehyde vapors	70 x 390 x 390	-	office a year.	8
CAR50		Kit for using withou	t filter		4
PMAF		Manual pump for reago	ent tubes		0,4
TROR	10 reagent tubes for "organic" tests				
TRAC	10) reagent tubes for "corr	osive" tests		0,1
TROA	5 reagent tubes for «	organic» tests and 5 rea	gent tubes for «c	orrosive» tests	0,1
EE1	Additional containment shelf for AFP3X and AF3X	22 x 550 x 465	5	-	5
EE2	Additional containment shelf for AFP5-2X and AF5-2X	30 x 545 x 470	7		5
SEPVC	PVC additional containment shelf	20 x 525 x 455	5	-	4
SBPVC	PVC containment sump	90 x 535 x 465	24	-	3
JF10D		Absorbent mats (pack of	10 sheets)		1

(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents.

N.B: Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

equipments























EN 14470-1 & FM FILTERING VENTILATION SAFETY CABINETS TYPE-30 MINUTES







AF35+ CORG51



▲ AF34+ CORG51

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested to NF X 15-211 - May 2009.
- Compliant to articles R.5132-66 and R.5132-68 of the Public Health Code
- Complies with recommendation for risk prevention and safety.
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Tested and approved for 30 minutes according to EN 14470-1 and EN 1363-1.
- Tested and approved to FM 6050 (Factory Mutual international)
- Standardized warning labels in accordance with ISO 3864, standards, Directive 92/58/EEC, EN 14470-1 and FM specifications.
- Electric fan conforms to CE specifications.

ADVANTAGES

- Labopur® technology.
- · Available in 2 versions: solid doors or glass doors.
- Self-contained cabinets for your safety.
- · Elimination of dangerous vapors.
- No connection or evacuation required, no civil engineering solution.
- · Ventilation system operation indicator light.
- Window for checking the presence of the filter adapted to your needs
- Active charcoal filter for organic vapors or high efficiency polyvalent active charcoal filter(1) tested to NF X 15-211 standard.
- Anti-dust filter, 92% efficiency against particles < 3 μm.

- Easy replacement of the active charcoal filter.
- Hour meter permanently indicating the total duration of use of the cabinet. After programming, every 60 hours an acoustic signal indicates that the active charcoal filter should be checked for saturation.
- 30 minutes fire resistance according to the ISO 834 standard curve.
- Base with cover for easy movement by pallet truck, when empty, except for the «under-cabinet» models.
- Self-closing cabinets, with preponderance of doors and doors held open by thermo-fuses triggered at 47°C.

TECHNICAL CHARACTERISTICS

- Insulated panel construction with high resistance to chemical attack.
- Light grey RAL 7035 frame with yellow RAL 1023 plated fields.
- Fireproof glass door(s), thickness 17 mm.
- · Standardized warning labels.
- Containment shelves adjustable in height at 32 mm intervals.
- Removable containment sump at the bottom.
- Ventilation holes Ø 100 mm for possible connection.
- Self-closing doors with preponderance of wings.
- System for holding doors in open position with automatic closing in case of fire.
- · 3 points key lock.
- Locking system with anti-spark lock.
- · Adjustable legs for levelling.
- 2 independent storage compartments for the AFV35 and AF35 models.





















Filtration box:

- Silent fan: 220-240 volts 50 Hz; 86 m3/hour flow rate; 0.1 A; 20 watt; 43 dB(A) sound level (excluding air flow) with plug and electric cable IP54 protection.
- Casing to be equipped with a molecular filter ORG50 or CORG51 for indoor discharge, or with a kit for use without active charcoal filter (CAR50) for outdoor connection.

OPTIONS

Additional shelf, perforated cover plate for containment sump, sliding drawer/containment sump.

Active charcoal filters:

The cabinets are delivered without active charcoal filters. You must select one from the table below depending on the type of products you are storing. See table.

PVC containment shelf and containment sump.

Filter saturation level control by REACTIVE TUBES:

- Control port on the front side.
- · Hole for the introduction of specialised reagent tubes.
- Use of a manual pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.

Absorbent mats to be placed at the bottom of the containment sump (supplied in packs of 10 sheets reference JF10D).

CABINETS TO BE EQUIPPED WITH A FILTER

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Weight (kg)
AF34	Filtering ventilation cabinet with solid door	Ext. 2210 x 605 x 550 Int. 1581 x 491 x 419	130	20	3	132
AFV34	Filtering ventilation cabinet with glass door	Ext. 2210 x 605 x 550 Int. 1581 x 491 x 419	130	20	3	132
AF35	Filter ventilation cabinet with solid doors	Ext. 2210 x 1115 x 550 Int. (2x) 1581 x 490 x 419	(2x) 120	(2x) 20	6	247
AFV35	Filtering ventilation cabinet with glass doors	Ext. 2210 x 1115 x 550 Int. (2x) 1581 x 490 x 419	(2x) 120	(2x) 20	6	247

CHARCOAL FILTERS AND ACCESSORIES

P/N	Description	Dimensions H x W x D (mm)	Containment capacity (L)		Weight (kg)	
CORG51	Active charcoal filter for corrosive and organic vapors (1)	70 x 390 x 390	-		9	
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	-	To be changed at least once a year.	8	
FOR50	Active charcoal filter for formaldehyde vapors	70 x 390 x 390	-		8	
CAR50		Kit for using witho	ut filter		2	
PMAF		Manual pump for rea	gent tubes		0,4	
TROR		10 reagent tubes for "o	rganic" tests		0,1	
TRAC		10 reagent tubes for "co	rrosive" tests		0,1	
TROA	5 reagent tubes	for «organic» tests and 5 re	agent tubes for «c	orrosive» tests	0,1	
E48	Additional containment shelf	30 x 490 x 410	6	-	3	
SE148	PVC additional containment shelf 30 x 475 x 405 5 -					
SB148	PVC containment sump 100 x 475 x 405 19 -					
JF10D		Absorbent mats (pack o	f 10 sheets)		1	

(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents.

N.B: Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

Fume hoods, filtering cabinets - Ventilation

















labopur® RECIRCULATING AIR BOX











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▲ H50+ + CORG51

▲ H50+S + CORG51 (filter change)

OPERATING PROCESS

Take advantage of **labopur®** technology onto any cabinet. The electric fan allows the extraction of harmful and toxic vapors from your cabinet. They are purified as they pass through the active charcoal filter and then released into the atmosphere without harming the environment.

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested and approved to NF X 15-211 - May 2009.
- · Electrical fan conforms to CE specifications.

ADVANTAGES

- Labopur® technology.
- · Adaptable to any cabinet, 3 connection possibilities.
- · Solution without civil engineering, simple and aesthetic assembly.
- · Indicator light for ventilation system operation.
- Window for checking the presence of the filter adapted to your needs
- High efficiency active charcoal filter specialised and treated according to the products stored, tested to NF X 15-211 - May 2009.
- Anti-dust filter, 92% efficiency against particles < 3 μm.
- · Easy replacement of the active charcoal filter.
- FILTRALARME 5 interface with touch screen for ergonomic hood management.
- 5 languages available: French English German Spanish -
- · Automatic airflow regulation.
- Airflow and hour meter displayed simultaneously.
- Date of installation of filters and filter types indicated and visible during operation.

DIGITAL SCREEN (H50+S)

- Measures airflow velocity (0.4- 0.6 m/s) and thus detects and alerts you with an audible and visual signal about filter clogging or any airflow anomaly.
- In compliance with standard NF X 15-211. The automatic airflow regulator (0.4-0.6 m/s) analyzes airflow speed in real time and checks that the hood is operating at negative pressure.

TECHNICAL CHARACTERISTICS

- · 12/10th steel construction.
- · White RAL 9010 and blue RAL 5015 epoxy paint.
- Silent electric fan, 43 dB(A) (excluding air flow), 220-240 volts 20 watt - 0,1 A - flow rate 86 m3/h - IP54 protection.
- Suction diameter: Ø 100 mm.

OPTIONS

- Active charcoal filter: boxes are delivered without active charcoal filter.
- You must select one from the table below according to the types of products you store.
- Filter saturation level control by REACTIVE TUBES: Control port on the side of the cabinet.
- Hole for introduction of specialized reagent tubes. Use of a hand pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.
- Connection kit option (KRC):
 - Allows easy connection of an Air Box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of Ø 100 mm flexible hose, ref. KL100.
- 2 clamps Ø 100 mm, ref. CDS100.

REMINDER: We also propose specific type of filters for specific applications. Filters must be changed at least once a year.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
H50+	Recirculating air box (delivered without filter)	310 x 510 x 485	15
H50+S	Recirculating air box with filtralarme 5 (supplied without filter)	310 x 510 x 485	15
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	8
CORG51	Polyvalent active charcoal filter ⁽¹⁾ for corrosive and organic vapors	70 x 390 x 390	9
FOR50	Active charcoal filter for formaldehyde vapors	70 x 390 x 390	9
CAR50	Kit to use recycling air box without filter	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	10 organic test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" and 5 "corrosive" test tubes	-	0,1
KRC	Connection kit for box	-	1

(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents. composés organic ou solvants.













labopur® VERTICAL RECIRCULATING AIR BOX











Counter hour meter

▲ H40+ + ORGFC (Bench and cabinet not included)

▲ H40+ + ORGFC (for changing the filter)

OPERATING PROCESS

Take advantage of **labopur®** technology onto any cabinet. The electric fan allows the extraction of harmful and toxic vapors from your cabinet. They are purified as they pass through the active charcoal filter and then released into the atmosphere without harming the environment.

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested and approved to NF X 15-211 - May 2009.
- Electrical fan conforms to CE specifications.

ADVANTAGES

- Labopur® technology.
- Suitable for any cabinet, especially for under-bench cabinets.
- Civil engineering-free solution, simple and aesthetic installation.
- Ventilation system operation indicator light.
- Window for checking the presence of the filter adapted to your needs.
- High efficiency active charcoal filter specialised and treated according to the products stored, tested to NF X 15-211 - May 2009.
- ADVANTAGES
- Anti-dust filter, 92% efficiency against particles < 3 μ m.
- · Easy replacement of the active charcoal filter.
- · Castors at the back for easy movement.
- FILTRALARME 5 interface with touch screen for ergonomic hood management.
- 5 languages available: French English German Spanish -Italian.
- · Automatic airflow regulation.
- Airflow and hour meter displayed simultaneously.
- Date of installation of filters and filter types indicated and visible during operation.

TECHNICAL CHARACTERISTICS

- 12/10th steel construction.
- White RAL 9010 and blue RAL 5015 epoxy paint.
- Silent electric fan, 43 dB(A) (excluding air flow), 220-240 volts 20 watt - 0,1 A - flow rate 86 m3/h - IP54 protection.
- Suction diameter: Ø 100 mm.

OPTIONS

- Active charcoal filter: The boxes are delivered without an active charcoal filter.
- You must select one from the table below according to the types of products you store.
- · Filter saturation level control by REACTIVE TUBES:
- · Control port at the front of the chamber.
- Hole for introduction of specialized reagent tubes. Use of a hand pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.
- Connection kit option (KRC):
- · Allows easy connection of an Air Box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of flexible hose Ø 100 mm, ref. KL100.
- 2 clamps of Ø 100 mm, ref. CDS100.

REMINDER: We also propose specific type of filters for specific applications. Filters must be changed at least once a year.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
H40+	Vertical recirculating air box (delivered without filter)	630 x 270 x 460	15
ORGFC	Active charcoal filter for organic vapors	100 x 200 x 400	8
CORGFC	Polyvalent active charcoal filter ⁽¹⁾ for corrosive and organic vapors	100 x 200 x 400	9
FORFC	Active charcoal filter for formaldehyde vapors	100 x 200 x 400	9
CARFC	Kit to use recycling air box without filter	100 x 200 x 400	2
PMAF	Manual pump	-	0,4
TROR	10 organic test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" and 5 "corrosive" test tubes	-	0,1
KRC	Connection kit for box	-	1

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VENTILATION BOX



△ CDV-A + option KRC + option KL100 + option CDS100



▲ CDV-A



OPERATING PROCESS

The electric fan allows the extraction of toxic vapors that are created inside your hazardous goods storage cabinets.

COMPLIANCE

Electric fan complies with ISO 3744 and CE specifications.

ADVANTAGES

- Adaptable to any type of cabinet, simple and aesthetic assembly.
 Easy adaptation between the opening on the cabinet and the ventilation opening.
- Connection via flexible hose Ø 100 mm (optional).
- · On/off switch with indicator light to control the fan power supply.

TECHNICAL CHARACTERISTICS

- 12/10th steel construction, epoxy painted white RAL 9010.
- Steel volute electric fan with on/off switch.
- 220/240 volts 50 Hz -62 W 0.28 A 57 dB(A) (excluding airflow)
- Flow rate: 240 m3/h.
- Inlet diameter: Ø 100 mm / outlet diameter: Ø 100 mm.

OPTIONS CONNECTION KIT (KRC)

- · Allows easy connection of a box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of flexible hose Ø 100 mm, ref. KL100.
- 2 clamps of Ø 100 mm, ref. CDS100.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)	
CDV-A	Steel ventilation box	235 x 260 x 245	8	
KRC	Connection kit for box	-	1	
1 KL100	Hose diam. 100 mm, per metre	-	0,2	
CHJ	Steel connection sleeve diam. 100 mm	-	0,1	
CDS100	Clamp diam. 100 mm			

VENTILATION EQUIPMENTS



P/N	Description	Weight (kg)
2 R100	Duct connection diam. 100 mm	0,5
3 RT188	Cross in PVC diam. 100 mm	0,5
5 CT90	PVC 90° elbow diam. 100 mm	0,5
6 V125	Manually operated PVC damper diam. 125 mm	1
7 BT188	PVC tee diam. 100 mm (also available in Y, please consult us)	0,5
3 ELE75	Reducer diam. 100/75 mm	0,5
3 ELE39	Reducer diam. 125/100 mm	0,5



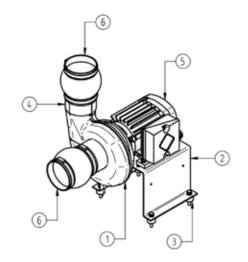


Fume hoods, filtering cabinets - Ventilation

ATEX RADIAL FAN WITH VOLUTE GROUP II - 2G EX EB IIC T4 GB



- 1. Fan casing
- 2. Mounting chair
- 3. Rubber vibration damper (supplied)
- 4. Pressure port
- 5 Motor
- 6. Connection with flexible sleeves on suction and discharge sides (supplied)



WHAT IS AN EXPLOSIVE ATMOSPHERE?

An explosive atmosphere (ATEX) is a safety zone classification for environments in which flammable gases, vapours, dusts or fumes are present or likely to form such as a laboratory. These zones are defined by the ATEX Directive 2014/34/EU.

WHAT ARE THE RISKS ASSOCIATED WITH EXPLOSIVE ATMOSPHERES?

An explosive atmosphere results from a mixture of combustible substances (flour, wood dust, solvent vapours, etc.) with air, in such proportions that an ignition source of sufficient energy produces an explosion.

An explosive atmosphere can cause fires and/or explosions, resulting in significant injury and material damage.

On average, one explosion occurs every day in the industrial sector in France. The effects can be devastating, both in human and material terms. Sectors where chemicals or high levels of dust are handled (wood, metal, food, laboratory, etc.) are particularly concerned.

COMPLIANCE

The prevention of the risk of explosion is covered by specific regulations, known as the ATEX regulations. Two European directives apply to users and manufacturers in areas where there is a risk of explosion:

- Requirements to improve the health and safety protection of workers potentially at risk from explosive atmospheres (Directive 1999/92/EC of 16 December 1999).
- Equipment and protective systems intended for use in potentially explosive atmospheres.

ADVANTAGES OF AN ATEX ENGINE

- · Explosion-proof.
- Does not produce sparks: reduced risk of fire.
- · Reliable over time.
- · Energy-efficient.

TECHNICAL DATA

- Corrosion-resistant plastic radial fan with volute manufactured from PPS.
- $\boldsymbol{\cdot}$ Fan frame in epoxy-painted sheet steel.
- · Voltage: 230V; Freq. 50Hz; Nominal current: 1.37 A.
- · Noise level: 65 dB(A) (excluding air flow).
- Protection rating: IP55 .
- Ex classification: e II 2G Ex eb IIC T4 Gb.
- Category 3 (zone 2): for motors used in environments where high explosion risks may occur frequently.
- Temperature class T4 (135°C).
- · Supplied with:
- ${\boldsymbol \cdot}$ Rubber vibration dampers .
- Connections with flexible connectors on suction and discharge sides, diam. 75 mm.

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Containment

Toxic cabinets and Multirisk

File cabinets Anti-fire equipments

Showers and firstaid equipments

P/N	Description	Dimensions H x W x D (mm)	Air flow rate (m³/h)	Diameter diameter (mm)	Weight (kg)
MATEX100	Atex radial volute fan	400 x 230 x 377	100	75	8,5
ELE75	Rigid PVC reducer	-	-	75/100	-

RISKS ASSOCIATED WITH LITHIUM-ION BATTERIES

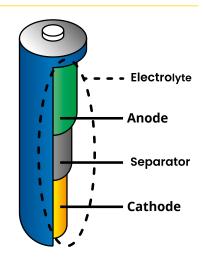
WHAT IS A LITHIUM-ION BATTERY?

A Li-ion battery, or Li-ion accumulator, consists of two electrodes (cathode and anode) and an electrolyte that ensures the ion exchange of the system.

During the discharge (use) of the battery, ions move from the anode to the cathode. During charging, the reverse occurs. These two electrodes are insulated by a separator to prevent a short circuit.

WHAT ARE THE DANGERS ASSOCIATED WITH THESE BATTERIES?

Of the 50 potential accidental scenarios identified by INERIS (Institut National de l'Environnement Industriel et des Risques) during the various stages of the battery life cycle, 12 were considered critical. They concern in particular the storage, recharging and use stages. The most problematic outcome of these risks concerns battery fire (or metal fire). This is a significant risk because the fire caused by lithium-ion batteries cannot be extinguished in a conventional way, as the battery itself generates the oxygen molecules and heat needed for combustion. It can only be extinguished with the help of special powders, all in a confined environment (with the risk of the powder losing its effectiveness).



HOW DO THESE BATTERY FIRES ORIGINATE?

By thermal runaway due to overcharging or exposure to excessive temperatures

A battery usually delivers the chemically stored energy on discharge as electrical energy. However, not all of the energy may be delivered as electrical energy, but may cause overheating that can be as much as 7 to 11 times the electrically stored energy. Given the structure of the battery, the reaction itself becomes stronger and causes critical overheating. The materials of the battery also release bound oxygen, which further fuels the fire.

By full discharge

The full discharge associated with not using the battery for too long periods can damage the battery. If the battery is then exposed to temperatures that are too cold, this can cause a change in the physical and chemical properties of the electrolyte liquid and lead to the formation of flammable gas. The absence of the liquid breaks down the protection of the battery, leading to a short circuit or fire.

By mechanical damage

Shocks or misuse can damage the internal structure of the battery and lead to deterioration of the battery separator, leading to a short circuit or fire.

Anode Cathode

Top, components of a Li-ion battery. Below, how a Li-ion battery works in use.

HOW TO STORE THEM SAFELY?

Storage recommendations depend on the size and power of the battery:

Low power lithium batteries (less than 100 Wh per battery)

Those are the small batteries contained in mobile phones or computers, for example.

No special safety requirements apply here, as long as all the manufacturer's instructions and safety locations are followed. For larger quantities stored (volume over 7 m3) the guidelines for medium capacity lithium batteries applies.

Medium capacity lithium batteries (approx. 100 Wh per battery and 12 kg gross per battery)

Batteries in this category are used in electric bicycles, electric scooters or similar small vehicles. They should be stored in separate fire-resistant enclosures (e.g. a fireproof room or safety cabinet).

They should not be stored with other products and this area should be constantly monitored.

For larger quantities stored (area occupied at 60 m2) the guidelines for high power lithium batteries applies.

High capacity lithium batteries (more than 100 Wh per battery and 12 kg gross per battery)

Batteries in this category are mainly used in electric cars and large stand-alone appliances.

The recommendations for the storage of medium power batteries should form the basis for consideration. However, safeguards should be put in place on a case-by-case basis after consideration.

- If the storage space is large, fire protection must be adapted.
- If the use of sprinklers is allowed, it should be as localised as possible and it is recommended that the batteries are separated and stored in a confined environment to prevent a fire outbreak.

SAFETY CABINETS FOR THE STORAGE OF OF LITHIUM-ION BATTERIES



Range 790+LI





Range 790+FLI



Range 5LI



Range 14ELI



Range 14FLI



Range VTLI















105 MINUTES SAFETY CABINETS FOR LITHIUM-ION BATTERY STORAGE AND CHARGING

To ensure the safety of people and goods, we created a safety storage solution for lithium-ion batteries. Indeed, Li-ion batteries have the particularity to present many risks of which the most known and the most frequent is the thermal runaway which may be caused by a rise of temperature of the environment, a shock or a problem of assembly of the cabinet.

The consequence is that the battery can ignite dangerously and cause fire.

Based on our experience and our know-how on the EN14470-1 105 minutes European standard fire-proof cabinets, we offer several models of different sizes that can meet the widest variety of storage needs. These cabinets can be equipped as needed, with perforated shelves (with high load capacity - 100kg per level) and Containment sumps in the lower part of the cabinet to prevent possible electrolyte leakage damages from the battery. There is also the possibility to recharge batteries via the rack power strips. The exceptional fire resistance of our cabinets (105 minutes under the European test) guarantees maximum safety. However, it is possible to further secure the storage by adding optional solutions such as:

- The internal safety extinguisher in the special Li-ion battery cabinet (ref. EX100LI or EX200LI)
- Or the safety set including the extinguisher, an audible and visual alarm, the smoke detector, the control box and a cable passthrough in the upper part of the cabinet PINTOLI ref. (VIG190 ou VIG290).

There are four types of usage, depending on your needs:

Simple battery storage: Cabinet equipped with perforated shelves and a Containment sump.

- Storage and charging of batteries: Cabinet equipped with perforated shelves, a Containment sump and electrical outlet racks + PEXTBALI (max. 4 cables from 4 to 15 mm).
- Simple battery storage + advanced protection system: Cabinet equipped with perforated shelves with a Containment sump + optional advanced protection system (either a fire extinguisher or a security set including visual and sound alarm, control box, automatic smoke detector, fire extinguisher and cable passthrough).
- Storage and charging of batteries + advanced protection system:
 Cabinet equipped with perforated shelves, a Containment sump and electrical outlet racks + optional advanced protection system (either a fire extinguisher or a security set including visual and sound alarm, control box, automatic smoke detector, fire extinguisher and cable pass-through).

The containment sump must be of controlled tightness and must resist the physiochemical properties of the material it contains.

In the event of a fire, the cabinets must not be moved except by the fire brigade.



The cabinets can be connected to a **three-phase** electrical supply system. We can design and equip our cabinets according to your requirements or electrical constraints. Quick disconnection systems and other electrical specifications are available according to your needs.

OUR CABINETS ARE SUITABLE FOR STORING AND RECHARGING LITHIUM-ION BATTERIES INCLUDED IN THE FOLLOWING EQUIPMENT (NON-EXHAUSTIVE LIST):



Electric bicycles



Chainsaws, hedge trimmers, lawn mowers...



Drones



Electric bikes



Electro-portable battery powered tools



Electric scooters



Elevator trolleys

COMPLIANCE

- REGULATION EU -2023/1542 Article 42 4. Storage or transport conditions ensure the conformity of batteries.
- Complies with level 2 of standard EN 16121+A1 (opening/ closing 80000 cycles and placement of the load defined by the manufacturer on the shelves).
- Proven fire resistance of 105 minutes, according to the ISO 834 curve as per the EN 14470-1 standard
- Standardized warning labels in accordance to ISO 3864 and ISO 7010, as well as the European directive 92/58/EEC.

CONSTRUCTION

- · Steel construction and double thermal insulation triple wall.
- Outer walls in 12/10th steel and white RAL 9010 epoxy painting.
- Thermal insulation panels limiting thermal bridges.
- · Melamine interior panels.

EOUIPMENTS

- Thermodilating door seals.
- · Doors with automatic closing.
- · Key closing.
- Ventilation holes with ventilation outlet Ø 100 mm for possible connection.
- Ventilation ducts with hot-melt system to isolate the contents of the cabinet in case of fire.
- Fixing point for earthing link.

OPTIONAL ACCESSORIES

- Perforated shelves with a load capacity of 100 kg (ref. E34LI and E35LI)
- Removable Containment sump at the bottom (ref. B148 and B235)
- Fire extinguisher automatically triggered at 79°C by special lithium thermal bulb (Ref. EX100LI, EX200LI or EX500LI) (by smoke detection if included in the VIG190 / VIG290 / VIG590).
- Rack of electrical outlets for recharging batteries (ref. PRISELI / see the chart by country).
- Fire-resistant cables and casing.
- 3ML IEC cable for quick disconnection.
- Drilling in the lower part for cable passage with fire-resistant cable (Ref. PEXTBALI)
- Security and alarm unit comprising: visual and audible alarm, control box, fire extinguisher with automatic smoke detector activation, and cable duct (Ref. VIG190 or VIG290).

VENTILATION

All cabinet models have ventilation holes, allowing them to be connected to a ventilation system. Forced ventilation is strongly recommended to prevent internal heat build-up or stagnation of vapors in the event of electrolyte liquid leakage. This can be connected either to an external outlet or to a ventilation or filter box.





Lithium-ion cabinets

Flammable cabinets

cabinets

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File cabinets

Showers and first-





180 min

Fire-resistant construction
(from inside to outside)
certified EI 180 min type A1,
in accordance with standard NF EN 13501-2.



105 min

Fire resistance (from the outside inside) tested 105 min and approved for 90 min, in accordance EN 14470-1 & EN 1363-1.





Audible and visual alarm (VIG290)



Smoke detector (VIG290)



Visual and audible alarm box (VIG290)



Automatic fire extinguisher (EX200LI) included in VIG290



Pallet truck movement (empty)



PRISELI racks and shelves (E35LI)



Drilling for cable passage PEXTBALI













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793+LIX2 + 2 PRISELI + B235

NON-EQUIPPED CABINETS

P/N		Description	External dimensions	Internal dimensions	Empty weight without options (kg)	
White	Black	Description	H x W x D (mm) H x W x D (mm)			
793+LI	793+NLI	2 doors counter cabinet to be equipped	1100 x 1137 x 670 ⁽¹⁾	820 x 1000 x 410	297	
798+LI	798+NLI	1 door counter cabinet to be equipped	1100 x 635 x 670 ⁽¹⁾	820 x 490 x 410	182	
794+LI	794+NLI	1 door tall cabinet to be equipped	1950 x 635 x 620 ⁽²⁾	1620 x 490 x 410	287	
795+LI	795+NLI	2 doors tall cabinet to be equipped	1950 x 1137 x 620 (2)	1620 x 1000 x 410	453	

PRE-EQUIPPED CABINETS

P/N		Describation	External dimensions	Weight
White	Black	Description	H x L x P (mm)	(kg)
793+LIA2	793+NLIA2	2 doors counter-top 90 minutes fire cabinet for Li-ion batteries pre-equipped with 2 x E35LI shelves + 1 x EX100LI (extinguisher)	1100 x 1137 x 670 ⁽¹⁾	299
793+LIX2	793+NLIX2	2 doors counter-top 90-minutes fire cabinet for Li-ion batteries, pre-equipped with 2 E35LI shelves + 1 x VIG190 (visual and audible alarm, control box, automatic smoke detector, EX100LI fire extinguisher and cable duct on top [ref. PINTOLI])	1100 x 1137 x 670 ⁽¹⁾	302
798+LIA2	798+NLIA2	1 door counter-top 90 minutes fire cabinet for Li-ion batteries pre-equipped with 2 shelves E48LI + 1 x EX100LI (extinguisher)	1100 x 635 x 670 ⁽¹⁾	184
798+LIX2	798+NLIX2	90-minutes fire cabinet, counter-top, 1 door for Li-ion batteries, pre-equipped with 2 shelves E48LI + 1 x VIG190 (visual and audible alarm, control box, automatic smoke detector, EX100LI fire extinguisher and cable duct on top [ref. PINTOLI])	1100 x 635 x 670 ⁽¹⁾	187
794+LIA4	794+NLIA4	1 door high 90 minutes fire cabinet for Li-ion batteries pre-equipped with 4 shelves E48LI + 1 x EX100LI (extinguisher)	1950 x 635 x 620 (2)	289
794+LIX4	794+NLIX4	1 door high 90 minutes fire cabinet for Li-ion batteries pre-equipped with 4 shelves E48LI + 1 x VIG190 (visual and audible alarm, control box, automatic smoke detector, EX100LI fire extinguisher and cable duct on top [ref. PINTOLI])	1950 x 635 x 620 ⁽²⁾	292
795+LIA4	795+NLIA4	2 doors high 90 minutes fire cabinet for Li-ion batteries pre-equipped with 4 shelves E35LI + 1 x EX200LI (extinguisher)	1950 x 1137 x 620 ⁽²⁾	455
795+LIX4	795+NLIX4	2 doors high 90-minutes fire cabinet for Li-ion batteries, pre-equipped with 4 E35LI shelves + 1 x VIG290 (visual and audible alarm, control box, automatic smoke detector, EX200LI fire extinguisher and cable duct on top [ref. PINTOLI])	1950 x 1137 x 620 ⁽²⁾	457

⁽¹⁾ Depth including connecting sleeve at the back. Depth without sleeve: 620 mm (2) Height including connecting sleeve on top. Height without sleeve: 1900 mm















Lithium-ion cabinets

Flammable

Corrosive

Toxic cabinets and Multirisk

Containment

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Anti-fire equipments File cabinets

Showers and firstaid equipments





794+LIX4 + 4 PRISELI + B148

ACCESSORIES

ACCESSOI	RIES		
P/N	Description	Weight (kg)	Corresponding cabinet(s)
E48LI	Perforated shelf for 1 door cabinet	5	798+LI and 794+LI
E35LI	Perforated shelf for 2 doors cabinet	7	793+LI and 795+LI
B148	Containment sump for 1 door cabinet	5	798+LI and 794+LI
B235	Containment sump for 2 doors cabinet	10	793+LI and 795+LI
EX100LI	Fire extinguisher with automatic triggering at 79°C per thermal bulb for lithium	2	All models except 795+LI
EX200LI	Fire extinguisher with automatic triggering at 79°C per thermal bulb for lithium for 795+LI	3	795+LI
VIG190	Security and alarm package including visual and audible alarm, control box, self-activating smoke detector, EX100LI fire extinguisher and cable duct	5	All models except 795+LI
VIG290	Security and alarm package including visual and audible alarm, control box, self-activating smoke detector, EX200LI fire extinguisher and cable duct for 795+LI	6	795+LI
PEXTBALI	Cable entry hole with fire-resistant cable entry at the bottom (max. 4 cables)	-	Any model
PINTOLI	Internal cable duct in the upper part	-	Any model
PRISELI	Rack of 8 electrical outlets (220 volts - 4000 watts - 16 amps -50hz)	2	Any model
PRISELIF	Rack of 8 electrical outlets type F (Germany)	2	Any model
PRISELICH	Rack of 8 electrical outlets type J (Switzerland)	2	Any model
PRISELIUK	Rack of 7 electrical outlets type G (United Kingdom)	1,7	Any model
PRISELICC	Rack of 6 electrical outlets equipped with a thermal-magnetic circuit breaker	-	Any model
ONDULI	4-socket safety inverter for VIG190 or VIG290 only (H 90 x W 163 x D 245 mm - 230 volts - 300 watts - 500 volts)	3,5	Any model
SERCODE	Digital code lock, one per door, equipped with its security key	1	Any model
SED	WiFi alarm and data logger system	1	Any model













105 MINUTE SAFETY CABINETS FOR LITHIUM-ION BATTERY STORAGE AND CHARGING





▲ 790+1FLIX4+B1FLI

▲ 790+2FLIXA+B2FLI

COMPLIANCE

- REGULATION EU -2023/1542 Article 42 4. Storage or transport conditions ensure the conformity of batteries.
- Construction for fire resistance (from outside to inside) of 105 min or 90 min, according to EN 14470-1 & EN 1363-1.
- Fireproof construction (from the inside to the outside) certified EI 180 min type A1, according to NF EN 13501-2.
- Standardised pictograms in accordance with ISO 3864, ISO 7010, European Directive 92/58/EEC and EN 14470-1.

ADVANTAGES

- Full height handle for better ergonomics and ease of opening.
- Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new layout
- Aesthetic and easy to use skirting board cover without the need for fixing tools.
- Ventilation ducts with hot-melt system to isolate the contents of the cabinet in the event of fire.

PASSIVE SAFETY

- · Double wall construction:
- External walls in 12/10th steel + white epoxy paint RAL 9010.
- Internal walls in white RAL 9010 melamine.
- Thermal insulation panels between the walls to limit thermal bridges.
- Fixing point for earthing.

ACTIVE SAFETY

- · Thermo-expanding door seals.
- Ventilation holes with 100 mm diameter ventilation outlet for possible connection.
- Doors with automatic closing and key lock.

OPTIONS

- Perforated shelf for 790+1FLI with 100 KG load capacity (Ref. F1FLT)
- Shelving consisting of 4 perforated levels for 790+2FLI with 150 KG load capacity (Ref. R2FLI). Total shelf weight: 30kg. Colour: grey RAL 7035. Perforated posts at 25mm pitch
- Containment sump at the bottom (Ref. B1FLI or B2FLI)
- Fire extinguisher automatically triggered at 79°C by special lithium thermal bulb (Ref. EX500LI) (by smoke detection if included in the VIG590).
- Rack of electrical outlets for recharging batteries (ref. PRISELI / see the chart by country).
- · Fire-resistant cables and casing.
- 3ML IEC cable for quick disconnection.
- Drilling in the lower part for cable passage with fireproof cable gland (Ref. PEXTBALI)
- Security and alarm unit comprising: visual and audible alarm, control box, fire extinguisher automatically triggered by a smoke detector, and cable duct (Ref. VIG590).













NON-EQUIPPED CABINETS

P/N	Description	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	Weight (kg)
790+1FLI	Safety cabinet for the storage of of lithium-ion batteries	2050 ⁽¹⁾ x 905 x 903	1685x760x 695	392
790+2FLI	Safety cabinet for the storage of of lithium-ion batteries	2050 ⁽¹⁾ x 1502 x 903	1685x1350x695	652

PRE-EQUIPPED CABINETS

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)
790+1FLIA4	2 doors 90 minute fire cabinet for Li-ion batteries pre-equipped with 4 shelves E1LI + 1 x EX500LI (extinguisher)	2050 ⁽¹⁾ x 905 x 903	432
790+1FLIX4	2 doors 90-minute fire cabinet for Li-ion batteries, pre-equipped with 4 E1FLI shelves + 1 x VIG590 (visual and audible alarm, control box, automatic smoke detector, 1 EX500LI fire extinguishers and cable duct on top [ref. PINTOLI])	2050 ⁽¹⁾ x 905 x 903	442
790+2FLIA4	2 doors 90 minute fire cabinet for Li-ion batteries pre-equipped with 4 E2LI shelves + 2 x EX500LI (fire extinguisher)	2050 ⁽¹⁾ x 1502 x 903	692
790+2FLIX4	2 doors 90-minute fire cabinet for Li-ion batteries, pre-equipped with 4 E2FLI shelves + 1 x VIG590 (visual and audible alarm, control box, automatic smoke detector, 2 EX500LI fire extinguishers and cable duct at the top [ref. PINTOLI])	2050 ⁽¹⁾ x 1502 x 903	702

ACCESSORIES

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)	Corresponding cabinet(s)
E1FLI	Perforated shelf for cabinet 790+1FLI	50 x 750 x 680	7.5	790+1FLI
B1FLI	Containment sump for 790+1FLI cabinet	90 x 750 x 680	5	790+1FLI
R2FLI	Shelf with 4 perforated levels for 790+2FLI	1500 x 1250 x 600	30	790+2FLI
E2FLI	Additional level for 790+2FLI cabinet	50 x 1250 x 600	7	790+2FLI
B2FLI	Containment sump for 790+2FLI cabinet	90 x 1250 x 600	10	790+1FLI
EX500LI	Self-activating fire extinguisher at 79°C with special lithium bulb for 790+1FLI an	d 790+2FLI	2	Any model
VIG590	Security and alarm package including visual and audible alarm, control box, automatic smoke detector, EX500LI fire extinguisher and cable entry for 790+1FLI and 790+2FLI			Any model
PEXTBALI	Cable entry hole with fire-resistant cable entry at the bottom (max. 4 cables)			Any model
PINTOLI	Internal cable duct in upper part		-	Any model
PRISELI	Rack of 8 electric outlets (220 volts - 4000 watts - 16 amps - 50hz)		2	Any model
PRISELIF	Rack of 8 electric outlets type F (Germany)		2	-
PRISELICH	Rack of 8 electrical outlets type J (Switzerland)		2	-
PRISELIUK	Rack of 7 electrical outlets type G (United Kingdom)		1,7	-
PRISELICC	Rack of 6 electrical outlets equipped with a thermal-magnetic circuit breaker		-	Any model
ONDULI	4-socket safety inverter for VIG590 only (H 90 x W 163 x D 245 mm - 230 volts - 300 watts - 500 volts)		3,5	Any model
SERCODE	Digital code lock (one per door)		1	Any model
SED	WiFi alarm and data logger system		1	Any model

⁽¹⁾ Height including connecting sleeve on top. Height without sleeve: 2000 $\mbox{\mbox{mm}}$

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15 min
Fire-resistant construction
(from inside to outside)
certified EI 15 min type A1,
in accordance with standard NF EN 13501-1.



S806+LIA1 + PRISELI + GL06 + PEXTBALI50

COMPLIANCE

- REGULATION EU -2023/1542 Article 42 4. Storage or transport conditions ensure the conformity of batteries.
- Non-flammable insulating panels, classified A1 according to NF EN ISO 1182, between the walls.
- Fireproof construction certified EI 15 min type A1, according to NF EN 13501-1.
- Standardized warning labels in accordance to ISO 3864, ISO 7010 standards and to European Directive 92/58/EEC.

CONSTRUCTION

- Double wall 12/10 steel construction.
- Mineral fibre insulation 20 mm thick in accordance to NF EN ISO 1182.
- · White epoxy paint RAL 9010.
- · Adjustable retention shelves on racks.

EQUIPMENTS

- Ventilation by means of a lateral inner duct with opening at the top and bottom (Ø 100 mm).
- Roof ventilation outlet with connection sleeve (Ø 100 mm).
- · Hinged doors with reinforced hinges with manual closing.
- · Two-point locking.
- Key lock.

OPTIONS

- Perforated shelves with 50 KG load capacity (Ref. E04LI or E06LI)
- Removable Containment sump at the bottom (Ref. GL04 or GL06)
- Fire extinguisher automatically triggered at 79°C by special lithium thermal bulb (Ref. EX100LI, EX200LI or EX500LI)



S2004+LIA5 + 5 PRISELI + GL04 + 2 PEXTBALI50

- Rack of electrical outlets for recharging batteries (Ref. PRISELI / see the chart by country)
- Drilling in the lower part for cable passage with fireproof cable (Ref. PEXTBALI50)

VENTILATION

All cabinet models are equipped with ventilation holes, allowing them to be connected to a ventilation system. Forced ventilation is strongly recommended to avoid internal heat build-up or stagnation of vapors in case of electrolyte leakage. This can be connected either to an external outlet or to a ventilation or filter hox

ALARMWI DESCRIPTION

This Wi-Fi smoke detector alerts you if there is smoke or excessive heat build-up. It alerts you with an audible alarm for people nearby and an alert sent to your phone wherever you are.

- Easy to connect to your Wi-Fi, for alerts on your phone.
- · Audible alarm to warn as many people as possible.
- Threshold of detection: 37 °C.
- · Powered by 2x AA/LR6 battery.

VENTILATION

All cabinet models are equipped with ventilation holes, allowing them to be connected to a ventilation system. Forced ventilation is strongly recommended to avoid internal heat build-up or stagnation of vapours in case of electrolyte leakage. This can be connected either to an external outlet or to a ventilation or filter box.









NON-EQUIPPED CABINETS

P/N	Description	External dimensions H x W x D (mm)	Interior dimensions H x W x D (mm)	Empty weight without options
S804LI	2 doors counter cabinet to be equipped (depth 450)	895 x 1000 x 450 ⁽¹⁾	745 x 950 x 400	75
S806LI	2 doors counter cabinet to be equipped (depth 600)	895 x 1000 x 600 ⁽¹⁾	745 x 950 x 550	90
S2004LI	2 doors tall cabinet to be equipped (depth 450)	2095 x 1000 x 450 (2)	1945 x 950 x 400	152
S2006LI	2 doors tall cabinet to be equipped (depth 600)	2095 x 1000 x 600 ⁽²⁾	1945 x 950 x 550	174

PRE-EQUIPPED CABINETS

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)
S804+LIA1	2 doors counter-top fire resistant cabinet for lithium batteries pre-equipped with 1 x E04LI shelf + 1 x EX100LI (fire extinguisher)	895 x 1000 x 450 ⁽¹⁾	77
S806+LIA1	2 doors countertop fire resistant cabinet for lithium batteries pre-equipped with 1 x E06LI shelf + 1 x EX100LI (fire extinguisher)	895 x 1000 x 600 ⁽¹⁾	92
S2004+LIA5	2 doors high fire resistant cabinet for lithium batteries pre-equipped with 5 shelves E04LI + 1 x EX200LI (fire extinguisher)	2095 x 1000 x 450 ⁽²⁾	154
S2006+LIA5	2 doors high fire resistant cabinet for lithium batteries pre-equipped with 5 shelves E06LI + 1 x EX200LI (fire extinguisher)	2095 x 1000 x 600 ⁽²⁾	176

ACCESSORIES

P/N	Description	Weight (kg)	Corresponding Cabinet(s)
E04LI	Perforated shelf (depth 450)	3	S804LI et S2004LI
E06LI	Perforated shelf (depth 600)	3,5	S806LI et S2006LI
GL04	Containment sump (depth 450)	4	S804LI et S2004LI
GL06	Containment sump (depth 600)	5	S806LI et S2006LI
EX100LI	Self-activating fire extinguisher at 79°C with special lithium bulb	2	S804LI et S806LI
EX200LI	Self-activating fire extinguisher at 79°C with special lithium bulb	3	S2004LII
EX500LI	Self-activating fire extinguisher at 79°C with special lithium bulb	3	S2006LI
PEXTBALI50	Hole for cable passage with fireproof cable passage at the bottom (max. 4 cables)	-	Any model
PRISELI	Rack of 8 electrical outlets E+F (220 volts - 4000 watts - 16 amps - 50hz)	2	Any model
PRISELIF	Rack of 8 electric outlets type F (Germany)	2	
PRISELICH	Rack of 8 electrical outlets type J (Switzerland)	2	
PRISELIUK	Rack of 7 electrical outlets type G (United Kingdom)	1,7	
PRISELICC	Rack of 6 sockets equipped with a thermal-magnetic circuit breaker (4000 watts)	-	Any model
ONDULI	4-socket safety inverter for VIG190 or VIG290 or VIG590 (H 90 x W 163 x D 245 mm - 230 volts - 300 watts - 500 volts)	3,5	Any model
ALARMWI	Connected smoke detector with alarm on mobile application in case of triggering with wifi connection	-	-
SED	WiFi alarm and data logger system	1	Any model

⁽¹⁾ Depth including connecting sleeve at the back. Depth without sleeve: 400mm (S804LI) 550mm (S806LI) (2) Height including connecting sleeve at top. Height without sleeve: 2045 mm

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SAFETY CABINETS FOR STORAGE AND CHARGING OF LITHIUM-ION BATTERIES



▲ AZ301BLI + 4 PRISELI14 + EX200LI + PEXTBALI14



▲ AZ151BLI



▲ AZ111BLI



AZ51NLI + 2 PRISELI + EX100LI + PEXTBALI14



Perforated shelf C150 / C300



ALARMWI connected smoke detector (option)



Ventilation box CDV-A (option)



Fire extinguisher EX100LI/ EX200LI (option)



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Option SERCODE14



Cable management PEXTBALI14 (option included with PRISELI14)



COMPLIANCE

- REGULATION EU -2023/1542 Article 42 4. Storage or transport conditions ensure the conformity of batteries.
- Complies with recommendation for risk prevention and safety: allows batteries to be stored in a dedicated area.
- Standardised pictograms in accordance with ISO 3864-1 and ISO 7010 standards, and with the European directive 92/58/EEC.

ADVANTAGES

- Cost-effective solution for storing and charging your Li-ion batteries safely and in compliance with legislation.
- Standardised pictogram for the storage of Li-ion batteries.
- Work surface of the countertop cabinets (ref. AZ51BLI and AZ111BLI) covered by a rubber mat.

ACTIVE SAFETY

- Top and bottom ventilation holes on each door.
- · Hinged door(s) with 110° opening angle.
- 3-point lock and key.
- Drilling for connection to a forced ventilation system. (ref. AZVENT), supplied with a Ø 100 mm sleeve (included).

PASSIVE SAFETY

- · One-piece steel construction.
- Epoxy paint: Body grey RAL 7035; Door(s) blue RAL 5010.
- Perforated shelves, adjustable in height on racks, with a 15 mm pitch.

DESCRIPTION ALARMWI

This Wi-Fi smoke detector alerts you if there is smoke or excessive heat build-up. It alerts you with an audible alarm for people nearby and an alert sent to your phone wherever you are.

- · Easy to connect to your Wi-Fi, for alerts on your phone.
- · Audible alarm to warn as many people as possible.
- Threshold of detection: 37 °C.
- Powered by 2x AA/LR6 battery.

OPTIONS

- Fire extinguisher automatically triggered at 79°C by special lithium thermal bulb (Ref. EX100LI or EX200LI (by smoke detection if included in the VIG190 / VIG290).
- · Additional perforated shelf (ref: C150 and C300).
- · Self-activating fire extinguisher (ref. EX100LI and EX200LI).
- Hole for 1 cable (ref. PEXTBALI14).
- Rack of electrical outlets for recharging batteries (ref. PRISELI / see the chart by country).
- · Ventilation box (ref. CDVA).
- · Connection kit (ref.KRC).
- · Connected smoke detector (ref ALARMWI).
- Digital code lock (ref Sercode14).

P/ Black	'N Blue	Description	External dimensions H x W x D (mm)	Load capacity per shelf (kg)	perforated shelves	Weight (kg)
AZ51NLI	AZ51BLI	1 door counter cabinet (AZVENT included)	Ext.: 1000 x 500 x 500 Int.: 890 x 498 x 453	51	2	26
AZ111NLI	AZ111BLI	2 doors counter cabinet (AZVENT included)	Ext.: 1000 x 930 x 500 Int.: 890 x 925 x 453		2	43
AZ151NLI	AZ151BLI	Tall cabinet 1 door (AZVENT included)	Ext.: 1950 x 500 x 500 Int.: 1840 x 498 x 453	51	4	55
AZ301NLI	AZ301BLI	Tall cabinet 2 doors (AZVENT included)	Ext.: 1950 x 930 x 500 Int.: 1840 x 925 x 453	102	4	102
C1	50	Perforated shelf for model type AZ51BLI and AZ151BLI	elf for model type AZ51BLI and AZ151BLI 50 x 483 x 438 51			5
C3	00	Perforated shelf for model type AZ111BLI and AZ301BLI 50 x 913 x 438 102				10
EX1	00LI	Self-activating fire extinguisher at 79°C with special lithium bulb for AZ51BLI, AZ111BLI, AZ151BLI		-	2	
EX2	00LI	Self-activating fire extinguisher at 79°C with special lithium bulb for AZ301BLI		-	3	
PRIS	ELI14	Rack of 8 electrical outlets (250 volts - 4000 watts - 16 amps) Rack in E & F socket; Wall outlet in E socket (included PEXTBLALI14)		-	2	
PRISE	LIF14	Rack of 8 electrical outlets type F (Germany) (included in PEXTBLA	LI14)		-	2
PRISE	LICH14	Rack of 8 electrical outlets type J (Switzerland) (included in PEXTB	LALI14)		-	2
PRISE	LIUK14	Rack of 7 electrical outlets type G (UK) (included in PEXTBLALI14)			-	1,7
PRISE	LICC14	Rack of 6 electrical outlets equipped with a thermal magnetic circu		led inPEXTBLALI14)	-	-
PEXTE	BALI14	Hole for cable passage with cable passage at the bottom for 1 cable	e.		-	2
	ODE14	Digital code lock for 14ELI series			-	1
	V-A	Steel ventilation box			-	8
	RC	Connection kit for box (between box and cabinet)			-	1
AZV	ENT	Drilling for ventilation connection			-	-
	RMWI	Connected smoke detector with alarm on mobile application in case	of triggering with wifi connection	1	-	-
SI	D	WiFi alarm and data logger system			-	1

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NO-CHARGE STORAGE CABINETS FOR LITHIUM-ION BATTERIES







▲ AZ150BLI



▲ AZ110BLI



▲ AZ50NLI





▲ COU150



Ventilation box CDV-A (option)



Connected smoke detector ALARMWI (option)



Option SERCODE14





COMPLIANCE

- Complies with recommendation for risk prevention and safety.: allows batteries to be stored in a dedicated area.
- Standardised pictograms in accordance with ISO 3864-1 and ISO 7010 standards, and with the European directive 92/58/EEC.

ADVANTAGES

- · Cost-effective solution for storing and charging your Li-ion batteries safely and in compliance with legislation.
- Standardised pictogram for the storage of Li-ion batteries.
- · Work surface of the countertop cabinets (ref. AZ51BLI and AZ111BLI) covered by a rubber mat.

ACTIVE SAFETY

- Top and bottom ventilation holes on each door.
- · Hinged door(s) with 110° opening angle.
- 3-point lock and key.
- · Drilling for connection to a forced ventilation system. (ref. AZVENT), supplied with a Ø 100 mm sleeve (included).

PASSIVE SAFETY

- One-piece steel construction.
- Epoxy paint: Body grey RAL 7035; Door(s) blue RAL 5010.
- Perforated shelves, adjustable in height on racks, with a 15 mm pitch.

DESCRIPTION ALARMWI

This Wi-Fi smoke detector alerts you if there is smoke or excessive heat build-up. It alerts you with an audible alarm for people nearby and an alert sent to your phone wherever you are.

- Easy to connect to your Wi-Fi, for alerts on your phone.
- Audible alarm to warn as many people as possible.
- Threshold of detection: 37 °C.
- Powered by 2x AA/LR6 battery.

OPTIONS

- · Ventilation box (ref. CDVA).
- · Connection kit (ref. KRC).
- · Connected smoke detector (ref ALARMWI).
- Digital code lock (ref Sercode14).

INSULATING CUSHION OPTION

· Cushions with non-flammable textured glass fibre filling (ref. COU150 et COU300). Absorbent, dust-free, flame-retardant according to DIN 4102-4 and non-conductive material.

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Lithium-ion

cabinets

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Containment

Showers and first-

P/ Black	'N Blue	Description External dimensions H x W x D (mm)		Load capacity per shelf (kg)	Perforated shelves	Weight (kg)
AZ50NLI	AZ50BLI	1 door counter cabinet (2 fireproof & AZVENT cushions included)	Ext.: 1000 x 500 x 500 Int.: 890 x 498 x 453	75	2	28
AZ110NLI	AZ110BLI	2 doors counter cabinet (2 fireproof & AZVENT cushions included)	ounter cabinet (2 fireproof & AZVENT cushions included) Ext.: 1000 x 930 x 500 Int.: 890 x 925 x 453		2	49
AZ150NLI	AZ150BLI	door tall cupboard (4 fireproof cushions & AZVENT included) Ext.: 1950 x 500 x 500 Int.: 1840 x 498 x 453		75	4	59
AZ300NLI	AZ300BLI	Tall cupboard 2 doors (4 fireproof cushions & AZVENT included)	Ext. : 1950 x 930 x 500 Int. : 1840 x 925 x 453	125	4	102
COL	J150	Fire-retardant and absorbent pad for AZ150BLI and AZ50BLI 600 x 400 -		1		
COL	J300	Fire-retardant and absorbent pad for AZ300BLI and AZ110BLI	1000 x 600	-		2,7
ESE	150	Containment sump/bin for AZ50BLI and AZ150BLI	BLI		6	
ESE	300	Containment sump/bin for A110BLI and AZ300BLI				10
SERCO	RCODE14 Digital code lock for 14FLI series			1		
AZV	ENT	Hole for ventilation connection (included in AZ50BLI, AZ110BL	I, AZ150BLI, AZ300BLI).			-
ALAR	ALARMWI Connected smoke detector with alarm on mobile application in case of triggering with wifi connection.					-
KI	RC	Connection kit for box (between box and cabinet)			1	
CD	V-A	Steel ventilation box				8













SECURE TRANSPORT CASES FOR LITHIUM-ION BATTERIES





▲ VT2LI

▲ VT1LI

WHY CARRY YOUR LITHIUM BATTERIES IN SECURE CASES?

Lithium-ion batteries have become an essential part of everyday life and are used in many applications. However, they also present a high degree of potential danger and are subject to increasingly strict regulations, particularly during transport.

They are classified as dangerous goods and require generally approved packaging that must comply with stricts afety regulations.. Our storage cases for Li-ion batteries are UN-approved for the transport of intact or defective lithium batteries.

CHARACTERISTICS AND COMPLIANCE

- REGULATION EU -2023/1542 Article 42 4. Storage or transport conditions ensure the conformity of batteries.
- Cushions with textured fiberglass padding, flame retardant according to DIN4102-4 and non-conductive.
- Certified to STANAG 4280, DEF STAN 81-41, ATA 300, UN3480.
- IP67 approved: completely dust and waterproof to a depth of 1 m for 30 min.
- The total weight (including case and padding) must not exceed 13 kg.
- If the case is shipped, you must affix the class 9 hazardous materials label to the packaging.

ADVANTAGES

- The laser engraving of the approval number is easily visible by the control body.
- · Reusable transport case.
- You can use these cases for shipments if the packing instructions are followed (see instructions).
- · No individual packaging of the batteries is necessary.
- Stackable and extremely robust case.
- · Possibility to install a padlock (2 eyelets).
- · Simplified packing and shipping.
- To protect against a dangerous rise in temperature, the cells/batteries must be fully encapsulated in a non-combustible thermal insulation material. This insulation and absorption material is designed for the transport of new or defective Li-ion batteries. If your batteries leak, the cushions do not react with electrolytes or other hazardous substances and have a very high shock and electrolyte absorption capacity. They have a high compression elasticity and help to minimise shocks and vibrations during transport.

Ref.	Description	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	Weight (kg)
VT1LI	Transport case for lithium battery, 1 compartment	150 x 510 x 420	130 x 475 x 350	4,5
VT2LI	Transport case for lithium batteries, 2 compartments	150 x 510 x 420	130 x 475 x 350	4,5

without notice and without incurring obligations.10/2023









FIRE EXTINGUISHER FOR LITHIUM-ION BATTERIES





EX9LI

▲ EX6LI

COMPLIANCE

Fire extinguisher compliant with NF EN 3-7+A1 and the Pressure Equipment Directive 2014/68/EU.

TECHNICAL CHARACTERISTICS

- The fire extinguishers in the water range are auxiliary pressure refillable devices, fitted with a propellant capsule.
- Extinguishing agent: Water + fluorine-free additive + additional charge
- New generation additives free of fluorinated chemical compounds PFAS perfluorohexanoic acid (PFHxA), PFOA and PFOS recognized as Persistent, Bioaccumulative and Toxic (PBT), safe for the environment, for living beings and totally biodegradable.
- Painted steel body and anti-corrosion coating in oven-cured epoxy polyester resin.
- Light alloy cover head protected against corrosion by black cataphoresis.
- Brass striker with nickel plating for better perforation and corrosion protection.
- Green safety pin, with plastic seal (breakable, non-repositionable seal with space for marking the verification date).

ADVANTAGES

- Easy to maintain and environmentally friendly.
- Hose with trigger valve and sprayer on pipe with crimped connection for targeted and metered delivery to the fire.
- · Wide top opening for easy control and loading.
- Visualisation of the impact by locking the handle in the lower position.
- The extinguishers are charged with water not mixed with the extinguishing agent. The extinguishing agent is contained in a patented floating bottle (the extinguishing agent mixes with the water when pressurised). In this way, during regulatory checks, the water to be recycled can be discharged as it is not altered by the additive.

A fire extinguisher must be checked annually and overhauled every ten years by a competent person or organisation. It must be marked with a clearly identifiable label by the person or organisation that carried out the check.

P/N	Description	External dimensions H x W x Ø (mm)	Volume (L)	Fire class	Maximum energy capacity of the battery (Wh)	Weight (kg)
EX6LI	Fire extinguisher for Lithium	440 x 240 x 175	6	AB	135	11
EX9LI	Fire extinguisher for Lithium	590 x 240 x 175	9	AB	315	15

without incurring obligations, 10/2023

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ISO









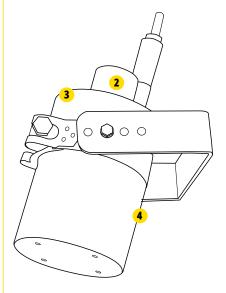


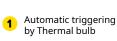
HOW OUR INTERNAL FIRE EXTINGUISHER FUNCTION AGAINST LITHIUM-ION FIRES



THE FIRE TRIANGLE ▼

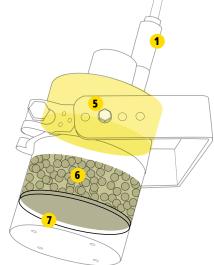






2 Thermal connection

3 Stainless steel lid



4 Stainless steel hull

5 Solid component

6 Mineral resin

7 Watertight closure + filter

TECHNOLOGY

The aerosol fire-extinguishing agent comes in the form of a solid solution using the latest condensed generation, composed mainly of potassium salt, without any pyrotechnic materials such as nitroquanidine or nitro-cellulose.

On activation, the component transforms into a highly effective volatile solution («cloud») which spreads evenly throughout the protected enclosure using the momentum generated during the transformation process.

The aerosol agent is suitable for fire classes A, B, C & F (according to EN2 Classification) and A, B and C (according to NFPA10 Classification).

CHEMICAL REACTIONS IN A FIRE

A fire is a chemical reaction in which three elements must be present for combustion to occur.

What is the fire triangle?

• Combustion is an exothermic redox reaction. It's a chemical reaction between a fuel and an oxidizer. This reaction produces energy (heat) and combustion products. A fire is combustion that develops uncontrolled in time and space.

- For a combustion reaction to start, three elements are required: fuel, oxidizer and activation energy. This combination is symbolically represented as a triangle.
- Fuel: This is the material likely to burn. It can be a solid (including dust and shavings) such as wood, paper or cardboard; a liquid (or liquefiable solid) such as gasoline, alcohol, etc.; a gas, such as butane, propane or hydrogen; or a metal or cooking oil. This is the reducing agent in the redox reaction. These fuels are categorized by fire classes.
- Oxidizer: The oxidizer is the second reactant in the chemical reaction. Except in very special cases, oxygen (O2), naturally present in ambient air (21%), is the main oxidizer.
- Activation energy: To initiate combustion, a supply of energy is required. Electric arc, thermal radiation, temperature rise and friction are the main sources of energy needed to trigger the combustion reaction.



Fume hoods, filtering

Lithium-ion

cabinets

EXTINGUISHING PRINCIPLE

Conventional extinguishing generally works by two methods:

- Suffocation or asphyxiation: depletion of oxygen in the air below 15% of normal levels puts pressure on the fire and extinguishes it.
- · Cooling: liquid solution to ensure heat absorption.

For both these methods, the fire triangle is no longer respected, ensuring that the flames are extinguished.

The aerosol fire extinguishing agent extinguishes fire by inhibiting the chemical chain reactions present in combustion, at the molecular level.

It eliminates free radicals from the flames and extinguishes the fire without depleting oxygen. In a typical fire, a molecular reaction develops between atoms and unstable fragments in the presence of oxygen. This process continues until the fuel is exhausted.

When the unit is activated, the solid agent composed of the elements below is diffused onto the fire, following the natural convection currents of combustion.

- Potassium nitrate: 77%
- Potassium carbonate: 4% (potassium carbonate)
- · Magnesium: <1%
- · Polymer resin: 18%

The solid particles of potassium salt, just a few microns in size, are suspended in an inert gas with an extremely high surface area. This increases efficiency and has the advantage of dispensing less extinguishing agent.

When the solid agent reaches and reacts with the flame, potassium

radicals (K) are formed mainly from the dissociation of K2C03. These K particles combine with other hydroxyl free radicals (OH) to form stable products such as KOH. This action extinguishes the fire without depleting or absorbing the ambient oxygen content. KOH also reacts in the presence of C02 to form K2C03. The solid particles of potassium carbonate (K2C03) are less than five micrometers in diameter and remain suspended in the protected chamber/enclosure for at least 30 minutes.

The aerosol fire-extinguishing agent is used as a total flooding agent in fire protection. However, unlike conventional gaseous agents, the total flooding effect is achieved without increasing the pressure in the protected enclosure. This makes it possible to protect any enclosure from a few cm3 to several hundred m3.

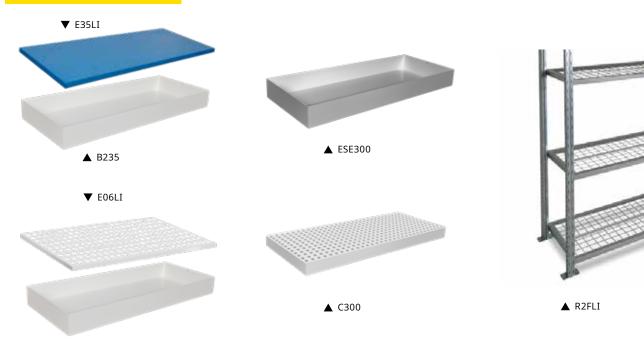
AVANTAGES

- · Certified 15-year life cycle.
- · Environmentally friendly.
- · Non-corrosive.
- · Non-toxic.
- Fully automatic activation system.
- Self-actuating agent at 300°C.
- Electric or manual activation.
- No piperack piping.
- No extinguishing agent storage cylinders.
- No pressurization: negligible maintenance.
- · Low investment cost: electrical installation only.

Ref.	Description	Dimensions H x Ø (mm)	Operational unloading time	Weight (kg)
EX100LI	Internal fire extinguisher for lithium battery	150 x 84	10 seconds	1,3
EX200LI	Internal fire extinguisher for lithium battery	185 x 84	10 seconds	1,8
EX500LI	Internal fire extinguisher for lithium battery	295 x 84	10 seconds	3,3

SHELVES & RETENTION BINS

▲ GL06



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ADVANCED SECURITY SOLUTIONS

▼ VIG190 - Security and alarm package comprising (or VIG590):



Visual and audible alarm



Control box







Automatically triggered smoke detector

Special lithium extinguisher

PINTOLI cable duct

WIFI ALARM AND DATA LOGGER SYSTEM

- · Data transmission via WiFi.
- · All measurement data available anywhere, anytime, on any device.
- Alarm when thresholds are exceeded.
- · Free online data hosting on Cloud.

The WiFi data logger system is the modern solution for monitoring temperature values in storage and work cabinets. The system is easy to install via a browser. WiFi data loggers reliably record temperature values at adjustable intervals

and transmit the measured values directly via a WiFi network to the Cloud. Recorded measurement values can be accessed anytime and anywhere via an Internet-connected tablet or PC. Limit violations are immediately notified by e-mail, or optionally (by SMS as a push message). In this way, critical processes are always under control, even when you're not on site. Thanks to its long battery life, the system is virtually maintenance-free.



▲ SED

ADDITIONAL FEATURES











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EX100LI / EX200LI / EX500LI

PEXTBALI





PEXTBALI50







SED

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RISKS ASSOCIATED WITH LITHIUM-ION BATTERIES

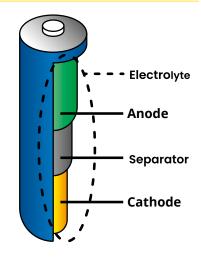
WHAT IS A LITHIUM-ION BATTERY?

A Li-ion battery, or Li-ion accumulator, consists of two electrodes (cathode and anode) and an electrolyte that ensures the ion exchange of the system.

During the discharge (use) of the battery, ions move from the anode to the cathode. During charging, the reverse occurs. These two electrodes are insulated by a separator to prevent a short circuit.

WHAT ARE THE DANGERS ASSOCIATED WITH THESE BATTERIES?

Of the 50 potential accidental scenarios identified by INERIS (Institut National de l'Environnement Industriel et des Risques) during the various stages of the battery life cycle, 12 were considered critical. They concern in particular the storage, recharging and use stages. The most problematic outcome of these risks concerns battery fire (or metal fire). This is a significant risk because the fire caused by Li-ion batteries cannot be extinguished in a conventional way, as the battery itself generates the oxygen molecules and heat needed for combustion. It can only be extinguished with the help of special powders, all in a confined environment (with the risk of the powder losing its effectiveness).



HOW DO THESE BATTERY FIRES ORIGINATE?

By thermal runaway due to overcharging or exposure to excessive temperatures

A battery usually delivers the chemically stored energy on discharge as electrical energy. However, not all of the energy may be delivered as electrical energy, but may cause overheating that can be as much as 7 to 11 times the electrically stored energy. Given the structure of the battery, the reaction itself becomes stronger and causes critical overheating. The materials of the battery also release bound oxygen, which further fuels the fire.

By full discharge

The full discharge associated with not using the battery for too long periods can damage the battery. If the battery is then exposed to temperatures that are too cold, this can cause a change in the physical and chemical properties of the electrolyte liquid and lead to the formation of flammable gas. The absence of the liquid breaks down the protection of the battery, leading to a short circuit or fire.

By mechanical damage

Shocks or misuse can damage the internal structure of the battery and lead to deterioration of the battery separator, leading to a short circuit or fire.

Anode Cathode

Top, components of a Li-ion battery. Below, how a Li-ion battery works in use.

HOW TO STORE THEM SAFELY?

Storage recommendations depend on the size and power of the battery:

Low power lithium batteries (less than 100 Wh per battery)

Those are the small batteries contained in mobile phones or computers, for example.

No special safety requirements apply here, as long as all the manufacturer's instructions and safety locations are followed.

For larger quantities stored (volume over 7 m3) the quidelines for medium capacity lithium batteries applies.

Medium capacity lithium batteries (approx. 100 Wh per battery and 12 kg gross per battery)

Batteries in this category are used in electric bicycles, electric scooters or similar small vehicles. They should be stored in separate fire-resistant enclosures (e.g. a fireproof room or safety cabinet).

They should not be stored with other products and this area should be constantly monitored.

For larger quantities stored (area occupied at 60 m2) the quidelines for high power lithium batteries applies.

High capacity lithium batteries (more than 100 Wh per battery and 12 kg gross per battery)

 $Batteries\ in\ this\ category\ are\ mainly\ used\ in\ electric\ cars\ and\ large\ stand-alone\ appliances.$

The recommendations for the storage of medium power batteries should form the basis for consideration. However, safeguards should be put in place on a case-by-case basis after consideration.

- If the storage space is large, fire protection must be adapted.
- If the use of sprinklers is allowed, it should be as localised as possible and it is recommended that the batteries are separated and stored in a confined environment to prevent a fire outbreak.

VENTILATION OF YOUR CABINET

ESSENTIAL ACCESSORIES TO IMPROVE THE SECURITY OF YOUR CABINET



We strongly recommend that you add a ventilation or filtration box to your safety cabinet.
The box extracts the stagnant vapors contained in your cabinet and renews the air, thus reducing internal overheating.







△ CDV-A + option KRC + option KL100 + option CDS100

THE CDV-A VENTILATION BOX

Connected to the cabinet using a connection kit (ref. KRC); the fan included in this box allows the extraction of toxic vapors generated in the cabinet and sucked outside the building via a wall outlet to be created.

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P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
CDV-A	Steel ventilation box	235 x 260 x 245	8
KRC	Connection kit for box	-	1
KL100	Hose diam. 100 mm, per metre	-	0,2
СНЈ	Steel connection sleeve diam. 100 mm	-	0,1
CDS100	Clamp diam. 100 mm	-	-

THE RIGHT QUESTIONS TO ASK

What is the composition of the fire extinguisher?

Metal fires, and particularly lithium, are extremely difficult to stop. Nevertheless, the technology developed by our experts use an assembly of potassium nitrate and polyepoxide to act on the lithium fire.

• Is it dangerous for humans?

No, but it is of course recommended to properly ventilate in order to remove stale air.

How long does the fire extinguisher last and when should it be changed?

The fire extinguisher does not require any specific maintenance during its lifespan of approximately 15 years.

How does a smoke detector work?

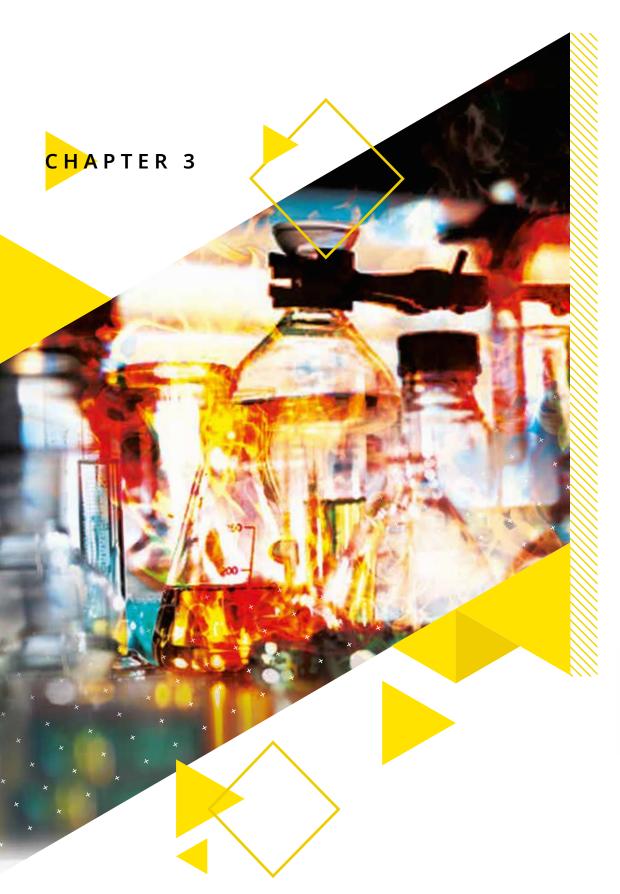
It is an optical smoke detector, an electric voltage is applied to the terminals of the electrodes, generating a current caused by ionization of the air in the chamber. When the smoke particles enter inside, the intensity of the current is disturbed, which then triggers the detector alarm.

What is the volume of the «VIG» alarm in decibel?

3 sound levels are possible depending on the connection made. We chose the most intense, at 109 db (A).

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SAFETY CABINETS FOR FLAMMABLE AND EXPLOSIVE PRODUCTS, AND GAS CYLINDERS





Range 790



Range 790+F



Range 790T



Range 790B



Range 3030



Range 3030T



Range 790+IA



I. SAFETY CABINETS EN 14470-1 EN 14470-2 FOR FLAMMABLE AND EXPLOSIVE PRODUCTS AND GAS CYLINDERS

GENERAL

For obvious safety reasons, flammable and/or explosive products or gas cylinders should be stored in safety cabinets. Regardless of your field of activity, whether you store low flammability or high flammability products, low flammability or high flammability gases, they must be stored safely in order to delay the risk of explosion due to fire.

STANDARDISATION

EUROPEAN STANDARDS EN 14470-1 and EN 14470-2



SCOPE OF APPLICATION:



EN 14470-1: This standard, which came into force in October 2004 and will be amended in 2023, concerns the storage of flammable products. It applies to cabinets with an internal volume of 2 m3 or less.



EN 14470-2: This standard, which came into force in April 2006, concerns the storage of compressed gas cylinders in laboratories. It applies to cabinets whose total internal volume allows the storage of gas cylinders with a total capacity of less than 220 litres.



FM 6050 (FACTORY MUTUAL): International insurance and accreditation body for fire protection equipment (through UL) and advice to companies. FM 6050 approval results in a 10 minute fire resistance for safety cabinets according to the NFPA 251-1969 temperature curve.



NF EN 16121+A1: This standard specification of storage furniture for collective use. NF EN 16121+A1: This standard specifies the requirements for determining the safety, strength, durability and stability of all types

MAIN REQUIREMENTS

1. Protection against fire:

In the event of fire, the cabinet must ensure that, for at least 30 minutes, its contents will not contribute to the risk or spread of fire. 3 classes have been defined by the standard to enable the user to choose the most suitable cabinet for his needs and the level of risk assessed.

EN 14470-1 Storage of flammable liquids	EN 14470-2 Storage of gas cylinder	Fire resistance
Type 30	Type G30	30 minutes
Type 60	Type G60	60 minutes
Type 90	Type G90	90 minutes

2. Fire tests:

The cabinets presented in this part of the catalogue have undergone a fire test according to EN 14470-1 (2004) or EN 14470-2 (2006). These tests were carried out by an external laboratory accredited by COFRAC.

3. Containment volume (EN 14470-1 only):

The volume of the spill containment sump must be able to hold at least 110% of the volume of the largest container stored in the cabinet or 10% of the total volume stored.

4. Construction:

The cabinet doors shall be self-closing in any position (EN 14470-1 only). The individual walls of the enclosure must be of identical construction and of the same thickness. In addition, the requirements of the standard relate to the construction of the cabinet itself and its ability to withstand external fire conditions (fire tests carried out in accordance to ISO 834-1 and EN 1363-1).

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5. Labelling:

The cabinets must be equiped with appropriate labelling: standardized warning labels in accordance to ISO 3864:

EN 14470-1: Flammable materials, no open flame and no smoking, maximum load per shelf, capacity of the largest container that can be introduced into the cabinet, fire resistance of the model (30, 60 or 90 minutes), keeping the doors closed when the cabinet is not in use.

EN 14470-2: Presence of compressed gas cylinders, fire resistance of the model (30, 60 or 90 minutes), keeping the doors closed when the cabinet is not in use.

6. Ventilation:

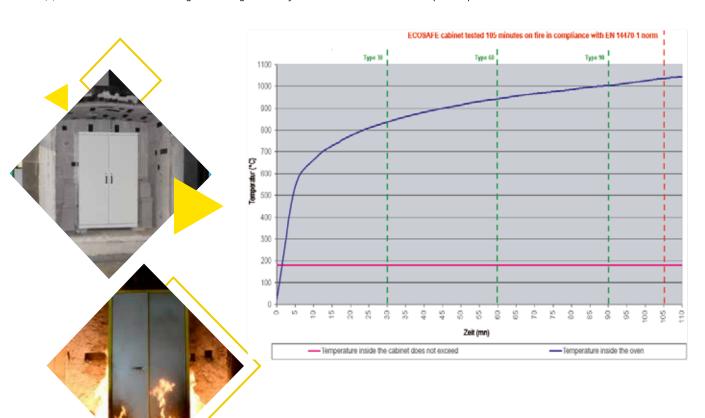
Cabinets shall be equiped with self-closing air inlets and outlets in the event of fire, allowing connection to a forced ventilation system. For a ventilated cabinet, the air exchange must be at least equal to 10 times the volume of the cabinet per hour (10 times in the case of storage of toxic gas cylinders) with the door(s) closed.

CHOOSE YOUR CABINET ACCORDING TO YOUR SECTOR OF ACTIVITY AND THE LEVEL OF FLAMMABILITY OF YOUR PRODUCTS:

Elach noint (1)	Level	Examples	Recommend	led Cabinets
Flash point ⁽¹⁾	of flammability	of products	in industry ⁽²⁾	in the laboratory
highter than 55°C	LITTLE FLAMMABLE Domestic fuel, diesel		Ranges 3030, 7030, 1, 2	Ranges 3030, 7030
between 21°C and 55°C	FLAMMABLE	Turpentine, white spirit	Ranges 3030, 7030, 1, 2, 3	Ranges 3030, 7030
between 0°C and 21°C	EASILY FLAMMABLE	Ethanol, toluene	Ranges 790+, 2, 5	Range 790+
under 0°C	EXTREMELY FLAMMABLE	Acetone, ether	Range 790+	Range 790+
Gas	cylinder model B2, B5, B11, B20 and	Range 7630BG	Range 7630BG	

(1) FP (flash point): the minimum temperature at which, under specified test conditions, a liquid emits sufficient gas to ignite momentarily in the presence of an ignition source.

(2) See the section of the catalog concerning our safety cabinets for flammable and explosive products.



















SAFETY CABINETS - EN 14470-1 & FM 105 MINUTES FOR FLAMMABLE PRODUCTS

COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Tested and approved for 10 minutes to FM 6050 (Factory Mutual International).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864, ISO 7010 and Directive 92/58/EEC and EN 14470-1.

ADVANTAGES

- Fire resistance of 105 minutes according to the ISO 834 standard curve.
- Fire tested by a French test laboratory accredited to EN:17025 by COFRAC, according to the ISO 834 standard curve.
- Full height handle for better ergonomics and ease of opening.
- Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new layout.
- Aesthetic and easy to use skirting board cover without the need for fixing tools.
- · Castors included for models 791+ and 792+.

PASSIVE SAFETY

- · Double wall construction:
- Outer walls in 12/10th steel, coated with white epoxy paint RAL 9010
- Inner walls in white RAL 9010 melamine.
- Thermal insulation panels between the walls to limit thermal bridges.
- Removable containment sump in the lower part. The containment sump must be positioned at the bottom of your cabinet. If you wish to use it as storage space, you must first place a perforated cover plate (see options) corresponding to your containment sump.
- · Signage with Standardized labeling.

- · Adjustable retention shelves (at 6.4 cm intervals).
- · Fixing point for earthing.

ACTIVE SAFETY

- ${\bf \cdot}$ Ventilation holes with Ø 100 mm ventilation outlet for possible connection.
- Ventilation ducts with hot-melt system to isolate the contents of the enclosure in the event of fire.
- · Thermo-expanding door seals.
- · Self-closing door(s) with key lock.
- Door(s) hold-open system with automatic closing system thermoregulated at 47°C.

OPTIONS

- · Additional shelves.
- Perforated cover plate for containment sump
- PVC overlay
- · Ventilation or filtration boxes
- Absorbent mats to be placed at the bottom of the containment sump (packs of 10 sheets).
- Colored doors available on models 794+ and 795+:
- White frame and shelf RAL 9010; yellow door(s) RAL 1023.
- · Code lock (1 per door).
- Refrigeration system: to increase the security of your cabinet and to control the temperature internal, we offer a refrigeration system. Consult us for more information.



VENTILATION FOR YOUR CABINET

An essential accessory to improve the safety of your cabinet.

We strongly recommend the addition of a ventilation or filtration box to your safety cabinet.

The box allows you to extract the stagnant vapors contained in your cabinet and to renew the air, thus reducing internal overheating.













Fume hoods, filtering

cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans





Standardized labeling



Retention shelves



Self-closing door with thermo-fuse



Removable containment sump



Key locking system



Moving by pallet truck (empty)



SERCODE code lock



Cooling system

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Anti-fire equipments

Showers and firstaid equipments

EN EN 1363-1

















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▲ 798+E



△ 794+E



△ 795+PJE

















PRE-EQUIPPED CABINETS

P/N						Storage	Delive	red with	Maximum	
		Туре	Number of door(s)	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	capacity	Retention	Containment	load by shelf	Weight (kg)
white	yellow		or door(s)	II X W X D (IIIIII)	II X W X D (IIIIII)	(L)	shelf	sump	(kg)	
791+E	791+PJE	under-bench	1	630 x 635 x 570 ⁽¹⁾	420 x 490 x 285	30	1	1	30	127
792+E	792+PJE	under-bench	2	630 x 1137 x 570 ⁽¹⁾	420 x 1000 x 285	60	1	1	50	213
798+E	798+PJE	counter	1	1100 x 635 x 670 (2)	820 x 490 x 410	65	2	1	30	182
793+E	793+PJE	counter	2	1100 x 1137 x 670 (2)	820 x 1000 x 410	115	2	1	50	297
794+E	794+PJE	tall	1	1950 x 635 x 620 (3)	1620 x 490 x 410	130	3	1	30	287
795+E	795+PJE	tall	2	1950 x 1137 x 620 (3)	1620 x 1000 x 410	250	3	1	50	453
795+900E	795+900PJE	tall	2	1950 x 905 x 620 (3)	1620 x 765 x 410	200	3	1	46	438

ACCESSORIES

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)
E1	Retention shelf for 1 door cabinet type 791+	30 x 485x 285	3
E2	Retention shelf for 2 doors cabinet type 792+ (1)	30 x 992 x 285	6
E48	Retention shelf for 1 door cabinet - W: 635 - D: 670 mm (1)	30 x 490 x 410	3
E35	Retention shelf for 2 doors cabinet - W: 1135 - D: 670 mm	30 x 992 x 410	6
E235-900	Retention shelf for 2 doors cabinet - W: 900 - D: 670 mm	30 x 760 x 410	4
B1	Containment sump for 1 door cabinet type 791+	100 x 480 x 315	3
B2	Containment sump for 1 door cabinet type 792+ - W: 900 - D: 670 mm	100 x 985 x 315	8
B148	Containment sump for 1 door cabinet - W: 635 - D: 670 mm	100 x 480 x 410	4
B235	Containment sump for 2 doors cabinet - W: 1135 - D: 670 mm	100 x 985 x 410	8
B235-900	Containment sump for 2 doors cabinet - W: 900 - D: 670 mm	100 x 753 x 410	8
C1	Perforated cover plate for 1 door cabinet type 791+	90 x 470 x 305	3
C2	Perforated cover plate for 2 doors cabinet type 792+ -W: 635 - D: 670 mm	90 x 980 x 305	6
C148	Perforated cover plate for 1 door cabinet - W: 635 - D: 670 mm	90 x 460 x 395	3
C235	Perforated cover plate for 2 doors cabinet - W: 1135 - D: 670 mm	90 x 975 x 395	6
C235-900	Perforated cover plate for 2 doors cabinet - W: 900 - D: 670 mm	90 x 747 x 400	8
RRA34	4-level shelf + load plate for 795+ cabinets	1570x980x390	-
SERCODE	Digital code lock, equipped with its security key	-	1
SERCODEH	Horizontal digital code lock for ref 791+ and 792+		
TP148	Sloping roof for 1 door cabinet	235 x 640 x 620	10
TP235	Sloping roof for 2 doors cabinet	235 x 1140 x 620	20

⁽¹⁾ Depth with connecting sleeve at the rear. Depth without sleeve: 520 mm

Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive cabinets

Toxic cabinets and Multirisk

Containment and cans

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Anti-fire equipments File cabinets

Showers and firstaid equipments

⁽²⁾ Depth with connecting sleeve at the rear. Depth without sleeve: 620 mm (3) Height with connecting sleeve above. Height without sleeve: 1900 mm

EN 14470-1















90 MINUTES SAFETY CABINETS EN 14470-1 & FM FOR FLAMMABLE PRODUCTS WITH ERGONOMIC RETENTION DRAWERS







△ 794T+5 Self-closing fire containment drawers ⁽²⁾



△ 795T+6
Self-closing fire containment drawers (2)

PRE-EQUIPPED CABINETS

P/N	Description	Туре	Number of door(s)	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	Weight (kg)
791T	Cabinet with 1 drawer	under-bench	1	670 x 635 x 615 (1)		155
792T	Cabinet with 1 drawer	under bench	1	670 x 1137 x 615 ⁽¹⁾		240
794+T4	1 door cabinet with 4 drawers	tall	1	1950 x 635 x 620 ⁽³⁾	1620 x 490 x 410	301
794+T5	1 door cabinet with 5 drawers	tall	1	1950 x 635 x 620 (3)	1620 x 490 x 410	307
794+T6	1 door cabinet with 6 drawers	tall	1	1950 x 635 x 620 (3)	1620 x 490 x 410	313
795+T4	2 doors cabinet with 4 drawers	tall	2	1950 x 1137 x 620 (3)	1620 x 1000 x 410	483
795+T5	2 doors cabinet with 5 drawers	tall	2	1950 x 1137 x 620 (3)	1620 x 1000 x 410	495
795+T6	2 doors cabinet with 6 drawers	tall	2	1950 x 1137 x 620 (3)	1620 x 1000 x 410	507

ACCESSORIES

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)
C1T	Perforated cover plate for 1 door cabinet 791T+	80 x 430 x 390	8
C2T	Perforated cover plate for 1 door cabinet 792T+	80 x 940 x 390	8
T148	Self retracting drawer for 1 door cabinet - exclusively for cabinet 794/798	80 x 420 x 380	6
T235	Self retracting drawer for 2 doors cabinet - exclusively for cabinet 793/795	80 x 930 x 380	12

- (1) Depth with connecting sleeve at the rear. Depth without sleeve: 565 mm
- (2) To be ordered at time of manufacture. Maximum quantity per cabinet: 6
- (3) Height with connecting sleeve on top. Height without sleeve: 1900 mm









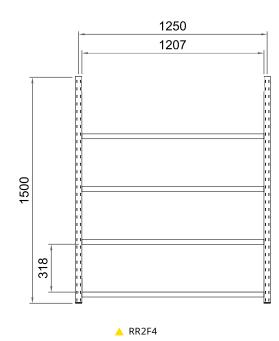


Fume hoods, filtering

90 MINUTES SAFETY CABINET FOR FLAMMABLE PRODUCTS









COMPLIANCE

- 90-minute fire resistance according to curve 834-1.
- Standardized pictograms in compliance with ISO 3864, ISO 7010, European Directive 92/58/EEC and EN14470-1

ADVANTAGES

- Full height handle for better ergonomics and ease of opening.
- Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new layout
- Aesthetic and easy to use skirting board cover without the need for fixing tools.
- Ventilation ducts with hot-melt system to isolate the contents of the cabinet in the event of fire.

PASSIVE SAFETY

- Double wall construction.
- Outer walls in 12/10 steel + white epoxy paint RAL 9010.
- $\boldsymbol{\cdot}$ Internal walls in white RAL 9010 melamine.

- Thermal insulation panels between the walls to limit thermal bridges.
- · Fixing point for earthing.
- 100% retention.

ACTIVE SAFETY

- Thermo-expanding door seals.
- Ventilation holes with 100 mm diameter ventilation outlet for possible connection.
- Self-closing doors with key lock.
- Door(s) holding system in open position with automatic closing thermoregulated at 47°C.

OPTIONS

4-level retention rack (RR2F4) with 75kg per level, evenly distributed

Réf.	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Weight (kg)
790+2F	Cabinet to equip	2050 ⁽¹⁾ x 1502 x 903	1685x1350x695	622
RR2F4	4-level retention rack for cabinet 790+2F	1500 x 1250 x 600	-	40

Flammable

and Multirisk

EN 14470-1















SAFETY CABINETS - EN 14470-1 & FM 105 MINUTES FOR THE STORAGE OF FLAMMABLE PRODUCTS ON BOARD SHIPS AND MARITIME TRANSPORT







Wall mounting kit

Non-slip mat



Floor fixing



Code lock option SERCODE code lock (1 per door)



COMPLIANCE

- Tested and approved according to EN 14470-1 and
- EN 1363-1.
- Tested and approved to FM 6050 (Factory Mutual International).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864, ISO 7010 and Directive 92/58/EEC and EN 14470-1.

PASSIVE SAFETY

- Fire resistance of 105 minutes according to the ISO 834 standard curve.
- · Double wall construction:
- Outer walls in 12/10 steel, painted with white epoxy paint RAL 9010.
- · Internal walls in white RAL 9010 melamine.
- Thermal insulation panels between the walls to limit thermal bridges.
- · Heat-expanding door seals.
- Height-adjustable retention shelves (6.4 cm intervals) and removable containment sump at the bottom. The containment sump must be positioned at the bottom of your cabinet. If you wish to use it as storage space, you must first place a perforated cover plate (see options) corresponding to your containment sump.

- · Signage with standardized labeling.
- Fixing point for earthing.
- · Self-closing door(s) with key lock.
- Door(s) holding system in open position with automatic closing thermo-regulated at 47°C.
- Ventilation ducts with thermo-fuse system to isolate the contents of the enclosure in case of fire.
- Ventilation holes with 100 mm diameter ventilation outlet for possible connection.
- · Wall mounting kit to prevent from marine movements.
- Non-slipping mat to prevent the containers from slipping during marine movements.
- 3 floor fixings by screwing.

OPTION

- · Shelf reinforcements for 75kg load capacity evenly distributed.
- · Additional shelves.
- Perforated cover plate for Containment sump.
- · PVC overpads.
- · Ventilation or filtration boxes.
- Colored doors available on models 794+ and 795+:
 - White frame and shelf RAL 9010; yellow door(s) RAL 1023.
- · Code lock (1 per door).













Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets







△ 794+BE

△ 798+BE

PRE-EQUIPPED CABINETS

D	/N			Number of	F. 4 1 . 1	Storage	Delive	red with	Maximum	147 - 1 - 1 - 4
white	yellow	Description	Туре	door(s)	External dimensions H x W x D (mm)	capacity (L)	Retention shelf	Contain- ment sump	load by shelf (kg)	Weight (kg)
791+BE	791+PJBE	Cabinet equipped	under-bench	1	630 x 635 x 570 ⁽¹⁾	30	1	1	30	127
792+BE	792+PJBE	Cabinet equipped	under-bench	2	630 x 1137 x 570 ⁽¹⁾	60	1	1	50	213
793+BE	793+PJBE	Cabinet equipped	counter	2	1100 x 1137 x 670 ⁽²⁾	115	2	1	50	297
798+BE	798+PJBE	Cabinet equipped	counter	1	1100 x 635 x 670 (2)	65	2	1	30	182
794+BE	794+PJBE	Cabinet equipped	tall	1	1950 x 635 x 620 (3)	130	3	1	30	287
795+BE	795+PJBE	Cabinet equipped	tall	2	1950 x 1137 x 620 (3)	250	3	1	50	453
795+900BE	795+900PJBE	Cabinet equipped	tall	2	1950 x 905 x 620 (3)	200	3	1	40	438

ACCESSORIES

P/N	Description	External dimensions H x W x D (mm)	Weight (kg)
E1	Retention shelf for 1 door cabinet type 791+ (in French)	30 x 485 x 285	3
E2	Retention shelf for 2 door cabinet type 792+ (1)	30 x 992 x 285	3
E48	Retention shelf for 1 door cabinet - W: 635 - D: 670 mm ⁽¹⁾	30 x 490 x 410	3
E35	Retention shelf for 2 door cabinet - W: 1135 - D: 670 mm	30 x 992 x 410	4
E235-900	Retention shelf for 2 door cabinet - W: 900 - D: 670 mm	30 x 760 x 410	4
C1	Perforated cover plate for 1 door cabinet type 791+	90 x 470 x 305	3
C2	Perforated cover plate for 2 doors cabinet type 792+ -W: 635 - D: 670 mm	90 x 980 x 305	6
C48	Perforated cover plate for 1 door cabinet - W: 635 - D: 670 mm	90 x 460 x 395	3
C35	Perforated cover plate for 2 doors cabinet - W: 1135 - D: 670 mm	90 x 975 x 395	6
C235-900	Perforated cover plate for 2 doors cabinet - W: 900 - D: 615 mm	90 x 747 x 400	5
T48	Self retracting drawer for 1 door cabinet - W: 635 mm - D: 615 mm	80 x 420 x 380	6
T35	Self retracting drawer for 2 doors cabinet - W: 1135 mm - D: 615 mm	80 x 930 x 380	12
T35-900	Self retracting drawer for 2 doors cabinet - W: 900 mm - D: 615 mm	80 x 695 x 380	12
SE148	PVC containment sump for E48	30 x 488 x 377	3
SB148	PVC Containment sump for 1-door L-shaped cabinet: 670 mm For 2 door L-shaped cabinet: 1135, 2 pieces per level	100 x 471 x 409	5
TP148	Sloping roof for 1 door cabinet - W: 635 mm - D: 670 mm	235 x 640 x 620	10
TP235	Sloping roof for 2 door cabinet - W: 1135 mm - D: 670 mm	235 x 1140 x 620	20
SERCODE	Digital code lock, equipped with its security key	-	1
SERCODEH	Horizontal digital code lock for ref 791+BE and 792+BE		

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Containment and cans

Anti-fire equipments

Showers and firstaid equipments

⁽¹⁾ Depth with connecting sleeve at the rear. Depth without sleeve: 520 mm (2) Depth with connecting sleeve at the rear. Depth without sleeve: 620 mm (3) Height with connecting sleeve above. Height without sleeve: 1900 mm

EN 14470-1













SAFETY CABINETS 30 MINUTES EN 14470-1 & FM FOR FLAMMABLE PRODUCTS





Standardized labeling



Self-closing door with thermo-fuse



Adjustable leveling feet



Retention shelves



Moving by pallet truck



Removable containment sump with perforated cover plate (optional)

△ 3035E+ C235

COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Tested and approved to FM 6050 (Factory Mutual international).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864 and ISO 7010 standards, Directive 92/58/EEC, EN 14470-1 and FM specifications.
- Fire tested by a French test laboratory accredited to EN:17025 by COFRAC, according to the ISO 834 standard curve.

ADVANTAGES

- 30 minutes fire resistance according to the ISO 834 standard curve.
- Base with cover for easy movement by pallet truck, when empty, except for the «under-cabinet» models.
- If the temperature rises to 47°C, a fuse link closes the door(s) automatically.

PASSIVE SAFETY

- Insulated panel construction with high resistance to chemical attack.
- · Light grey RAL 7035 frame with yellow RAL 1023 plated fields.
- Standardized labeling
- Height-adjustable retention shelves with 32 mm intervals.
- Removable containment sump at the bottom. The containment

sump must be positioned at the bottom of your cabinet. If you wish to use it as storage space, you must first place a perforated cover plate (see options) corresponding to your containment sump.

ACTIVE SAFETY

- \bullet Ventilation holes Ø 100 mm for possible connection.
- ${\boldsymbol{\cdot}}$ Self-closing door(s) with preponderance of wings.
- Door(s) holding system in open position with automatic closing thermoregulated at 47°C.
- Ventilation ducts with thermofusible system to isolate the contents of the cabinet in case of fire.
- 3 points key lock.
- · Non-sparking locking system.
- Adjustable leveling feet.
- Thermo-expanding door seals.

OPTIONS

- · Additional shelf.
- Perforated cover plate for Containment sump.
- Sliding drawer/Containment sump.
- PVC covers.
- · Ventilation or filtration boxes.
- Absorbent mats to be placed at the bottom of the containment sump (packs of 10 sheets reference JF10D).

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6050









Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets



▲ 3033UE





▲ 3034E

△ 3036UE

PRE-EQUIPPED CABINETS

		External Internal			ı	Delivered v	Maximum		
P/N	Description	External Dimensions H x W x D (mm)	Dimensions	Storage (L)	Number of shelves	Contain- ment sump	Steel perforated cover plate	load by shelf (kg)	Weight (kg)
3031E	1 door under-bench cabinet, fitted	635 x 605 x 630	365 ⁽¹⁾ x 491 x 475	30	-	1	1	30	64
3032E	2 doors under-bench cabinet, fitted	635 x 1115 x 630	365 ⁽¹⁾ x 1001 x 475	60	-	1	1	50	108
3034E	1 door tall cabinet, equipped	1980 x 605 x 550	1580 x 495 x 420	130	3	1	option	30	117
3035E	2 doors tall cabinet, equipped	1980 x 1115 x 550	1580 x 1050 x 420	250	3	1	option	50	210
3033UE	2 doors counter cabinet equipped	1198 x 1092 x 537	795 x 980 x 325	113	1	1	option	50	170
3035UE	2 doors tall cabinet, equipped	1731 x 1092 x 457	1330 x 980 x 325	170	2	1	option	50	210
3036UE	2 doors tall cabinet, equipped	1731 x 864 x 864	1330 x 750 x 730	228	2	1	option	50	210

⁽¹⁾ useful height 275mm

ACCESSORIES

P/N	Description	External dim. H x W x D (mm)	Retention(L)	Weight (kg)
E48	Containment shelf for 3034	30 x 490 x 410	6	3
E35	Containment shelf for 3035	30 x 992 x 410	12	4
E35U	Containment shelf for 3033U and 3035U	30 x 975 x 317	9	4,5
E6U	Containment shelf for 3036U	30 x 747 x 724	16	8
B148	Containment sump for 3031 - 3034	100 x 480 x 410	20	4
B235	Containment sump for 3032 - 3035	100 x 985 x 410	41	8
B35U	Containment sump for 3033U and 3035U	100 x 965 x 317	30	8
B6U	Containment sump for 3036U	100 x 737 x 724	53	14
C148	Perforated cover plate for 3031 - 3034	90 x 460 x 395	-	3
C235	Perforated cover plate for 3032 - 3035	90 x 975 x 395	-	6
C235U	Perforated cover plate for 3033U - 3035U	100 x 950 x 300	-	10
C6U	Perforated cover plate for 3036U	100 x 737 x 724	-	11
T148	Drawer/slide-out containment sump for 3031 - 3034	80 x 420 x 380	12	6
T235	Drawer/slide-out Containment sump for 3032 - 3035	80 x 930 x 380	28	12
SE148	PVC containment shelf for 3031 and 3034; for models 3032 and 3035, 2 pieces by level are required	30 x 475 x 405	5	3
SB148	PVC containment sump for 3031 and 3034; for models 3032 and 3035, 2 pieces by level are required	100 x 475 x 405	19	4
RRA34	4-level shelf + load plate for 3035 cabinets	1570x980x390	-	-

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Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments File cabinets

Showers and firstaid equipments

EN 14470-1













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30 MINUTES SAFETY CABINETS EN 14470-1 & FM FOR FLAMMABLE PRODUCTS WITH ERGONOMIC RETENTION DRAWERS



▲ 7031T



▲ 7032T



△ 3034T5



△ 3035T5

COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Tested and approved to FM 6050 (Factory Mutual international).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles.
- Standardized warning labels in accordance to ISO 3864 and ISO 7010 standards, Directive 92/58/EEC, EN 14470-1 and FM specifications.
- Fire tested by a French test laboratory accredited to EN:17025 by COFRAC, according to the ISO 834 standard curve.

ADVANTAGES

- 30 minutes fire resistance according to the ISO 834 standard curve.
- Base with cover for easy movement by pallet truck, when empty, except for the «under-cabinet» models.
- Self-closing cabinets, with a preponderance of wings and doors held open by thermofuses that are active at 47°C.
- · Many models available.
- Self-closing retention drawers (1) in case of fire.

- Insulated panel construction offering high resistance to chemical attack
- · Light grey RAL 7035 frame with yellow RAL 1023 plated fields.
- · Signalling by Standardized symbols.

ACTIVE SAFETY

- Ventilation holes Ø 100 mm for possible connection.
- · Self-closing door(s) with preponderance of wings.
- \bullet Door(s) holding system in open position with automatic closing thermoregulated at 47 $^{\circ}\text{C}.$
- Ventilation ducts with thermofusible system to isolate the contents of the cabinet in case of fire.
- · 3 points key lock.
- Non-sparking locking system
- · Adjustable leveling feet
- · Thermo-expanding door seals.

OPTIONS

· Additional drawers (10 sheets reference JF10D).

PASSIVE SAFETY

P/N	Description	Туре	Number of door(s)	External dimensions H x W x D (mm)	Internal dimensionsH x W x D (mm)	Weight (kg)
7031T	Cabinet with 1 drawer	under-bench	1	635 x 605 x 630	366 x 491 x 475	64
7032T	Cabinet with 1 drawer	under bench	1	635 x 1115 x 630	366 x 1001 x 475	108
3034T4	1 door cabinet with 4 drawers	tall	1	1980 x 605 x 550	1580 x 495 x 420	141
3034T5	1 door cabinet with 5 drawers	tall	1	1980 x 605 x 550	1580 x 495 x 420	147
3034T6	1 door cabinet with 6 drawers	tall	1	1980 x 605 x 550	1580 x 495 x 420	153
3035T4	2 doors cabinet with 4 drawers	tall	2	1980 x 1115 x 550	1580 x 1050 x 420	258
3035T5	2 doors cabinet with 5 drawers	tall	2	1980 x 1115 x 550	1580 x 1050 x 420	270
3035T6	2 doors cabinet with 6 drawers	tall	2	1980 x 1115 x 550	1580 x 1050 x 420	287
T148	Additional drawer for 1 door cabinet ⁽¹⁾	tall	-	80 x 420 x 380	-	6
T235	Additional drawer for 2 doors cabinet (1)	tall	-	80 x 930 x 380	-	12

(1) To be ordered at time of manufacture. Maximum quantity per cabinet: 6











Fume hoods, filtering

Flammable cabinets

30 MINUTES SAFETY CABINETS EN 14470-1 & FM WITH GLASS DOORS



Standardized labeling



Self-closing door with thermo-fuse



Height adjustable retention shelf



Removable containment sump with perforated cover plate (optional)



Moving by pallet truck (empty)



Adjustable leveling feet



△ 3034PVE



△ 3035PVE

COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Tested and approved to FM 6050 (Factory Mutual international).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864 and ISO 7010 standards, Directive 92/58/EEC, EN 14470-1 and FM specifications.

ADVANTAGES

- 30 minutes fire resistance according to the ISO 834 standard curve.
- Base with cover for easy movement by pallet truck, when empty, except for the «under-cabinet» models.
- Self-closing cabinets, with a preponderance of doors and doors held open by thermofuses that are active at 47°C.
- Immediate visualization of the products stored in the cabinet.

PASSIVE SAFETY

- Insulated panel construction with high resistance to chemical attack.
- · Light grey RAL 7035 frame with yellow RAL 1023 plated fields.

- Fireproof glass door(s), thickness 17 mm.
- · Standardized labeling
- Retention shelves adjustable in height at 32 mm intervals.
- Removable Containment sump at the bottom.

ACTIVE SAFETY

- Ventilation holes Ø 100 mm for possible connection.
- · Self-closing door(s) with a preponderance of wings.
- Door(s) holding system in open position with automatic closing thermoregulated at 47°C.
- Ventilation ducts with thermofusible system to isolate the contents of the cabinet in case of fire.
- 3 points key lock.
- · Non-sparking locking system
- · Adjustable leveling feet.
- · Thermo-expanding door seals.

OPTIONS

- Additional shelf.
- Perforated cover plate for containment sump
- Sliding drawer/Containment sump.
- · PVC covers.
- · Ventilation or filtration boxes.

s or designs at any time wit	Containment
scontinue or change specifications	File cabinets
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Anti-fire equipments

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P/N Description External Dimensions H x W x D (mm)		Fortend		Delivered with			
	Storage (L)	Steel Retention Shelves	Containment sump	Load capacity per shelf (kg)	Weight (kg)		
3034PVE	Tall cabinet with 1 glass door	1980 x 605 x 550	130	3	1	30	170
3035PVE	Tall cabinet with 2 glass doors	1980 x1115 x 550	250	3	1	50	255
E48	Retention rack for 3034PVE	30 x 490 x 410	-	-	-	-	3
E35	Retention shelf for 3035PVE	30 x 992 x 410	-	-	-	-	4
C148	Perforated cover plate for containment sump for 3034PVE	90 x 460 x 395	-	-	-	-	3
C235	Perforated cover plate for containment sump for 3035PVE	90 x 975 x 395	-	-	-	-	6
T148	Self retracting shelf for 3034PVE	80 x 420 x 380	-	-	-	-	6
T235	Self retracting shelf for 3035PVE	80 x 930 x 380	-	-	-	-	12
SE148	PVC Retention Shelf for 3034PVE for model 3035PVE 2 pieces by level are required	30 x 475 x 405	-	-	-	-	3
SB148	PVC Containment sump for 3034PVE for model 3035PVE 2 pieces by level are required	100 x 475 x 405	-	-	-	-	4

EN 14470-2













30 MINUTES SAFETY CABINETS EN 14470-2 FOR GAS CYLINDERS





△ 7634BG + RH4BG



Standardized labeling



Mounting rails with tension belt RH4BG / RH5BG (optional)



Shelf for one small gas cylinder P/N EG1 (optional)



Key locking system



Vent with thermo-fuse

COMPLIANCE

- Tested and approved to EN 14470-2 and EN 1363-1.
- Standardized warning labels in accordance to EN 14470-2, ISO 3864, ISO 7010 standards and with Directive 92/58/EEC.

ADVANTAGES

- \bullet 30 minutes fire resistance according to the ISO 834 standard curve.
- Fire tested by a French test laboratory accredited to EN:17025 by COFRAC, according to the ISO 834 standard curve.
- $\boldsymbol{\cdot}$ Base with cover for easy movement by pallet truck, when empty.

PASSIVE SAFETY

- Double insulated panel construction offering high resistance to chemical attack.
- · Light grey RAL 7035 frame with yellow RAL 1023 plated fields.
- · Standardized symbol signage in accordance to EN 14470-2.

ACTIVE SAFETY

- Ventilation holes Ø 100 mm for possible connection.
- Thermo-expanding door seals.
- Ventilation ducts with hot-melt system to isolate the contents of the enclosure in the event of fire.
- · Adjustable leveling feet
- · Lockable doors.

OPTIONS

- To improve the longevity and safety of your cabinet, we recommend that you connect it to a forced ventilation system. For more information, please contact us.
- In order to increase the safety of your cabinet and to control the internal temperature, we propose a refrigeration system. Please contact us for more information.

All models are delivered without interior equipment. They must therefore be equipped with rails for the support of gas bottles, access ramps, etc.













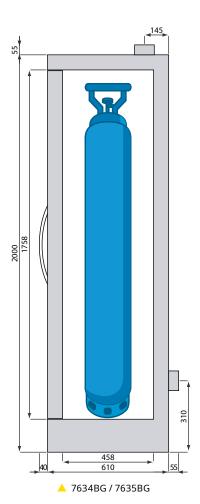


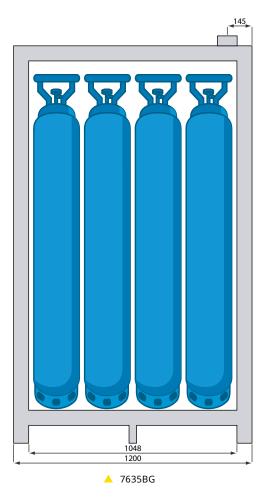
Fume hoods, filtering cabinets - Ventilation

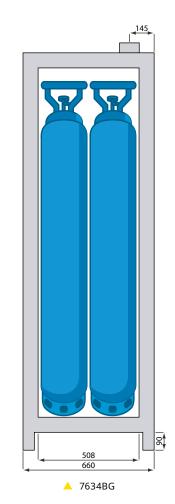
cabinets

Flammable cabinets

Corrosive







P/N	Description	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	Bottle storage in B50 bottles	Recommended equipment	Weight (kg)
7634BG	Tall cabinet 1 door	2000 x 660 x 610	1753 x 508 x 458	2	1	246
RH4BG	Horizontal rails with straps for fixing 2 B50 bottles	-	-	-	1	2
7635BG	Tall cabinet 2 doors	2000 x 1200 x 610	1753 x 1048 x 458	4	1	447
RH5BG	Horizontal rails with straps for fixing 4 B50 bottles	-	-	-	1	3
RABG	Galvanized steel ramp for 7634BG or 7635BG	38 x 450 x 398	-	-	1	10
EG1	Additional shelf for 1 gas cylinder type B2, B5, B10, B11, B15 or B20	245 x 245 x 245	-	-	-	3

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Showers and firstaid equipments

Anti-fire equipments

EN 14470-1













FIREPROOF SAFETY CABINETS EN 14470-1 TYPE 105 MINUTES WITH WASTE RECOVERY





△ 791+ARD (bench not included)

COMPLIANCE

- \bullet Tested and approved to EN 14470-1 and EN 1363-1.
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864 and ISO 7010 standards, directive 92/58/EEC and EN 14470-1.

ADVANTAGES

- 105 minutes fire resistance according to the ISO 834 standard curve.
- Fire tested by a French test laboratory accredited to EN:17025 by COFRAC, according to the ISO 834 standard curve.
- Full height handle for better ergonomics and ease of opening

PASSIVE SAFETY

- Double-walled construction in 12/10th grade steel with white epoxy paint; inner walls in melamine, color white RAL 9010.
- Thermal insulation panels between the walls to prevent thermal bridges.
- · Standardized labeling.
- Fixing point for earthing.
- Removable containment sump at the bottom.

ACTIVE SAFETY

- Ventilation holes Ø 100 mm for possible connection.
- Ventilation ducts with thermofusible system to isolate the contents of the cabinet in the event of fire.

time without notice and without incurring obligations, 10/2023

- Thermo-expanding door seals.
- Self-closing and keyed door.
- Door holding system with automatic closing in case of fire. Temperature-controlled at 47°C.

LIQUID WASTE RECOVERY SYSTEM

- Roof opening in the enclosure for the passage of the waste pipe, including an intumescent system to isolate the contents of the enclosure in the event of fire. This hole may cause variations in fire resistance.
- Funnel with removable grid in black HDPE for the collection of soiled liquids.
- \cdot Jerrycans in black HDPE, capacity 10 litres (can size: 265 x 185 x 290).
- Electronic level sensor mounted on velcro that can be fixed either on the jerrycan itself or on the wall of the cabinet.
- Audible and visual alarm to be placed, for example, on the backrest of a bench.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Containment sump	Weight (kg)
791+ARD	1 door under-bench waste collection cabinet	630 x 635 x 570 ⁽¹⁾	420 x 490 x 285	1	160
792+ARD	2 doors under-bench waste collection cabinet	630 x 1137 x 570	420 x 1000 x 285	1	230







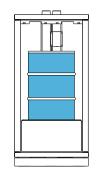






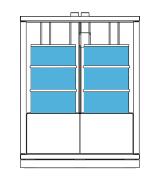
90 MINUTES SAFETY CABINET FOR DRUMS





▲ 790+1F+BC1F

Flammable cabinets



▲ 790+2F+2 x BC1F



△ 790+1F

△ 790+2F

COMPLIANCE

- 90 minutes fire resistance according to the 834-1 standard curve.
- Standardized warning labels in accordance to ISO 3864, ISO 7010, European directive 92/58/EEC and standard EN 14470-1.
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Article 45 of the decree of 11/05/2015: All polluting, flammable or combustible products must be stored in retention drums that are adapted in terms of volume but also in terms of physical and chemical properties so that they can be stored in accordance to the safety rules in force.

ADVANTAGES

- Full height handle for better ergonomics and ease of opening.
- Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new layout
- Aesthetic and easy to use skirting board cover without the need for fixing tools.
- Ventilation ducts with hot-melt system to isolate the contents of the cabinet in the event of fire.

PASSIVE SAFETY

- Double wall construction.
- Outer walls in 12/10 steel + white epoxy paint RAL 9010.
- Internal walls in white RAL 9010 melamine.
- Thermal insulation panels between the walls to limit thermal bridges.
- Fixing point for earthing.
- 100% retention.

ACTIVE SAFETY

- · Thermo-expanding door seals.
- Ventilation holes with 100 mm diameter ventilation outlet for possible connection.
- · Self-closing doors with key lock.
- Door(s) holding system in open position with automatic closing thermoregulated at 47°C.

OPTIONS

Removable 220 litre Containment sump in the lower part (optional) (ref. BC1F).

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Weight (kg)
790+1F	Cabinet for 1 drum	2050 ⁽¹⁾ x 905 x 903	1720x760x 827	392
790+2F	Cabinet for 2 drums	2050 ⁽¹⁾ x 1502 x 903	1720x1350x827	622
BC1F	Containment sump for 1 drum	510 x 665 x 665	510 x 665 x 665	25

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EN 14470-1 SAFETY CABINETS WITH AUTOMATIC INVENTORY MANAGEMENT (NFC GEOLOCALIZATION)







795+E + 3x(SC35IA + SE35 + ABOSCIA + ABOLOIA) + PEXTBAIA + CABIA + CAPRIA10 + E4GIA

793+E + 2x(SC35IA + SE35 + ABOSCIA + ABOLOIA) + PEXTBAIA + CABIA





WHY AUTOMATE YOUR INVENTORY?

In most cases, an inventory management is time consuming, with one person often dedicated to this task either on daily basis or too regularly for it to be cost effective. Based on our experience and know-how of fire resistant storage cabinets that comply with the European standard EN 14470-1 and are resistant to 105 minutes, we propose to add an automated inventory management of the products stored in your cabinet.

We have also found that up to 30% of products exceed their expiry date before they are used. This is a net loss that we propose to avoid at maximum.

To cope with the complexity of managing your inventory, we offer you a new range of intelligent cabinets. This range is equipped with NFC technology. Near Field Communication is a wireless communication technology that allows the transfer of information between several devices, in particular between your connected dock and your inventory management software. Thanks to this technology, you can track your inventory levels in real-time, in a simple and visible way. Inventory management is fully automated.

HOW DOES IT WORK?

Our connected bases (ref. **SC35IA**) equipped with NFC technology are positioned in the shelves (ref. **E35**) of your fireproof cabinet. Your containers are equipped with RFID sensors (ref. **CAPRIA10**). An RFID(2) sensor is placed under each product. Each sensor has a unique identifier to ensure perfect traceability.

In order to maintain the necessary retention volume and in compliance with the EN 14470-1 standard, your containers must be stored on a PVC containment shelf (ref. **SE35**) compatible with NFC technology. The containers placed on each connected set (shelf + base + rack) are identified and tracked. The data is transmitted electronically to the inventory management software.

Real-time data extraction (ref. **ABOSCIA**) is provided via an annual subscription. Then, to make use of the data of your inventory, we offer you, via the integration solution of our partner, a digital interface (ref. **ABOLOIA**). This software allows the geolocalization and automated management of your inventory during their life cycle. In addition, this subscription also allows the implementation of computer reports that can be configured according to your needs.

A double cable (ref. **CABIA**) comes out of the cabinet: an RJ45 cable for connection to the building's network and a power cable for the electrical connection. If it is not possible to connect to the building network, we offer a 4G transmitter for a wireless connection between the connected shelves and the software management (ref. **E4GIA**). This solution comes in the form of a connected box.















COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Tested and approved for 10 minutes to FM 6050 (Factory Mutual

6050

- · Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Standardized warning labels in accordance to ISO 3864, ISO 7010 and Directive 92/58/EEC and EN 14470-1.

ADVANTAGES OF FIREPROOF STORAGE

- Fire resistance of 105 minutes according to the ISO 834 standard curve.
- Fire tested by a French test laboratory accredited to EN 17025 by COFRAC, according to the ISO 834 standard curve.
- Full height handle for better ergonomics and ease of opening.
- · Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new
- · Aesthetic and easy to use skirting board cover without the need for fixing tools.

ADVANTAGES OF CONNECTED STORAGE

- · Automatic and reliable inventory management without manual intervention.
- · Location of bottles, flasks and containers on each level.
- · Real-time visualization of the movement of containers, stocks, their position via the interface and their history.
- Saves time in managing your stocks.
- · Management of expiry dates to avoid waste, for a more environmentally friendly consumption.
- · Minimise the risk of product handling and accidents.

PASSIVE SAFETY

- · Double wall construction:
- Outer walls in 12/10th steel, coated with white epoxy paint RAL 9010.
- · Inner walls in white RAL 9010 melamine.
- · Thermal insulation panels between the walls to limit thermal bridges
- Removable containment sump in the lower part. The containment sump must be positioned at the bottom of your cabinet. If you
- to use it as storage space, you must first place a perforated cover plate (see options) corresponding to your containment sump.
- Signage with Standardized labeling.
- Adjustable retention shelves (at 6.4 cm intervals).
- · Fixing point for earthing.

ACTIVE SAFETY

- \cdot Ventilation holes with Ø 100 mm ventilation outlet for possible connection.
- · Ventilation ducts with hot-melt system to isolate the contents of the enclosure in the event of fire.
- · Thermo-expanding door seals.
- Self-closing door(s) with key lock.
- · Door(s) hold-open system with automatic closing system thermoregulated at 47°C.

OPTIONS

- · Connected base equipped with NFC(1) technology for E35 shelf (ref.SC35IA)
- · White PVC containment shelf, thickness 3/10th (ref. SE35).
- · Set of 10 standard RFID(2) sensors for automatic inventory (ref. CAPRIA10)
- · Annual subscription for real time data extraction for 1 connected base (ref. ABOSCIA)
- · Annual subscription for a management software allowing the exploitation and the reading of the data for the automatic inventory (ref. ABOLOIA).
- 4G transmitter for a wireless connection between the connected shelves and the software management (ref. E4GIA).
- · Hole for cable passage with fireproof cable passage in the lower part (max. 4 cables) (ref. PEXTBAIA).

P/N	Description	Ext. dimensions H x W x D (mm)	Int. dimensions H x W x D (mm)	Containment sump	Weight (kg)
793+E	Safety cabinet type 90 min equipped with 2 shelves and 1 containment sump	1100 x 1137 x 670 ⁽³⁾	820 x 1000 x 410	1	297
795+E	Safety cabinet type 90 min equipped with 3 shelves and 1 containment sump	1950 x 1137 x 620 (4)	1620 x 1000 x 410	1	453
SC35IA	Connected base with NFC ⁽¹⁾ technology for E35 shelf	30 x 1000 x 400	-	-	7
SE35	Retention shelf in white PVC, 3/10ths thick for E35 shelf	30 x 980 x 405	-	-	5
E35	Retention shelf for 2 doors cabinet	30 x 992 x 410	-	-	4
ABOSCIA	Annual subscription for real time data extraction for 1 connected base	-	-	-	-
ABOLOIA	Annual subscription for a software management allowing the exploitation and data reading for the automatic inventory for 1 connected base	-	-	-	-
CABIA	Cable for double connection: RJ45 cable for connection to the building network + power cable for electrical connection for 1 cabinet	-	-	-	-
CAPRIA10	Pack of 10 standard RFID ⁽²⁾ sensors for automatic inventory for single use only	18 Ø	-	-	-
E4GIA	4G transmitter for wireless connection between the connected shelves and the software management	30 x 100 x 100	-	-	0,2
PEXTBAIA	Cable entry hole with fire-resistant at the bottom (max. 4 cables)	-	-	-	-

⁽¹⁾ Near Field Communication is a wireless communication technology that allows the transfer of information between multiple devices

Flammable

Fume hoods, filtering

and Multirisk

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⁽²⁾ Radio Frequency Identification is a method of storing and retrieving data remotely.

⁽³⁾ Depth with connecting sleeve at the rear. Depth without sleeve: 620 mm (4) Height with connecting sleeve on top. Height without sleeve: 1900 mm

















OUESTIONS AND ANSWERS ON FIRE RESISTANT CABINETS

does the technology check the How inventory level? Does it check the weight of the containers or the liquid height level inside the containers?

This technology does not check the weight yet (this feature is still under development). It allows you to check your inventory in realtime. For example, if you have 5 bottles each containing a different chemical (Methanol, Acetone, Nitric Acid, etc...). Each NFC tag will have been previously identified by the user to assign it to a type of product/bottle

On each bottle, there will be an NFC tag which contains the information such as: name of chemical product, production date, expiry date, whether the bottle is on the shelf on in transit (taken by a lab operator)

Very soon, there will be the possibility to check the level inside the chemical bottles and the software will give you what is the % of liquids inside the bottle. This is through a special NFC tag which is a bit more expensive than the normal one.

Do the users need a standard bottle as their container to store the chemical? Does it affect the technology if the sizes of the bottles are different?

Any container/bottle can be used no matter the size even if the bottles are of different sizes. The tag (placed under the container/ bottle) is where the information is stored. Be careful, the container/ bottle doesn't have to be a steel one. If the container is made of steel, the tag will not function properly and your client will need a special one that is not quoted in our basic offer.

How to set up SC35IA? just place it on top of

No set up is needed. The connected base SC35IA equipped with NFC technology is already installed in a containment shelf E35. Please view the video

Does the Tag have to be placed on the bottom of the bottle to efficiently work with the SC35IA? If yes what if the bottom of the bottle is not flat?

Yes, tags have to be placed at the bottom of the container/bottle in order for the data to pass through. No problem if the bottle is not flat. The tag is read till 3cms from top of the reader shelf.

Can the Tag be bent? (.i.e. for a bottle that is curved) Up to how many tags can be used per SC35IA?

The tag is soft and can be bent to a certain extent without jeopardizing its function. However, it is prefearable to avoid bending it. Several tagged bottles may be used on the SC35IA as long as the total weight of the bottles do not exceed the maximum loading on the shelf (50 kg).

Will the hole for inserting cables affect the fire-proof performance of the cabinet + the certification?

No. The cabinet is fire resistant and certified.

Why the RFID is single use only? Can the user just remove the RFID from one container and just re-stick the RFID to another container?

Note: RFID and Sensor tags are same. They can be single or multiple use. The user can remove it from one container and re-stick it to another one. However, the operation is time consuming (removing the tag, adding glue, clean the surface of the new bottle, then place the tag on it)., Moreover, there are risks of breakage/deterioration during the re-sticking. In addition, the tag has to be re-initialized with new data such as batch number, new name of the product,

Will the RFID get expired? Is it something they need to replace from time to time?

Data such as description, expiry date of the product, etc have to be entered by the user in order for the information to be visible in real-time. The RFID or sensor tag does not have any expiry date.

If there is a spill from the chemical, will the spill affect the sensor or is it water tight?

There could be some problems and this is why, if the customer stores chemicals, we propose the option SE35 (a retention shelf in PVC) in order not to alter the reading from the tag (the connection or reading between the connected shelf and the tag is little compatible with steel).

Could you clarify the difference between ABOSCIA / ABOLOIA?

ABOSCIA is the software that extracts data from the tag and a mandatory feature in order for the entire technology to work. It is an annual subscription per connected shelf. Meaning if your cabinet has 2 connected shelves, then the user has to purchase two subscriptions

ABOLOIA is the software that manages and process the data extracted

It is an annual subscription per connected shelf. If your cabinet has 2 connected shelves, then the user has to purchase two subscriptions. It is NOT mandatory. If the user already has a software that is compatible with our technology, then he can use his own.

In the case of ABOSCIA it says "Annual subscription for real time data extraction for 1 connected base" so if there are 4 different cabinets they will have 4 different annual subscription?

It is not per cabinet but per connected shelves.

For example, if you have 4 cabinets. Each cabinet has two connected shelves and two normal shelves. Then you will need a total of 8 ABOSCIA

If the end-user subscribes to ABOSCIA / ABOLOIA, is it renewed automatically every year?

The annual subscription of ABOSCIA and/or ABOLOIA is a contract between the user and us. It is renewed automatically every year and can be stopped by both parties before expiry date of the annual subscription. Ecosafe will be in charge of invoicing directly to the end user the annual subscription.



















Fume hoods, filtering

Flammable cabinets

If there is an error in the system, who can

The software company will be in charge of fixing any bugs. This can be done remotely.

Do E4GIA need any power system? How does it work? what is the duration?

E4GIA is an electrical wireless transmitter box using 4G technology. It will require electrical power. Its function is to transmit the data from the tags to the inventory software management. It is an optional item. User can use their own transmitter (wifi or other) to do so.

How to connect E4GIA to the 4G network?

It is the same as a Wifi connection, you need a network to send the information and the E4GIA is connected on the network by wifi.

Who is the provider of the 4G network? Is there a seperate subscription for that?

4G network will be your local provider. Subscription is done with your local provider (not with Ecosafe).

Can **End-user** have detailed more information about this Technology?

Refer to the video for further explanation.

How does ABOSCIA / ABOLOIA work? Can we view the software or have additional information?

We will soon show you how the software and all its features function.

How many devices can be connected to one subscription? Will this technology function on any operating system (iOs, Windows, Android, etc)?

Real-time data is accessible on any device as the information is stored on the provider's website.

Any specific safety feature in the automatic inventory management app? For example is there any alarm that informs if some bootle/tag has not been placed back in the cabinet after a certain time?

Additional safety features may be customized as each end user has his own requirements. When we first presented this technology during Forum Lab in Paris, it was able to detect in real-time if a bottle was wrongly placed (for example an acid bottle next to flammable products). An alarm was sent to a mobile phone and/ or to an email.

What are the features of the automatic inventory management?

- Quick and Reliable inventory
- Gain of time
- Real time visualization of your products
- Real-time localization of your products
- Minimize accidents
- Reduce waste
- Environmental consumption

Any other features of the automatic inventory management for example linking specific bottles to specific users?

We are constantly developping new and additional features to complement our main items..

© ECOSAFE reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations.10/2023 Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments File cabinets

Showers and firstequipments







Our connected cabinet is the winner of the 2023 innovation trophy!



II. SAFETY CABINETS FOR FLAMMABLE AND EXPLOSIVE PRODUCTS

GENERAL

For obvious safety reasons (fire, explosion, corrosion, poisoning, etc.), all dangerous products must be handled and stored with the greatest

This catalogue will offer you solutions for the storage of your flammable products according to your safety requirements. Whatever your field of activity (workshop, laboratory, storage warehouse, production unit, company department, etc.), whether you store low flammability or high flammability products, you must store them safely. Do not hesitate to call us for a quick and personalized advice.

What is a fire cabinet?

Fireproof cabinets protect flammable products - and therefore people and property - from the risk of fire or an abnormally high heat source. Protection against flames is ensured by the containment of the cabinet, thanks in particular to the automatic closing of the doors on many models, the presence of thermo-expanding seals and the presence of fire dampers at the ventilation inlet and outlet (standard EN14470-1). Some models are equipped with an automatic internal extinguishing device to extinguish or prevent the outbreak of a fire inside the enclosure itself.

STANDARDIZATION



CNPP FSE 98-006 SPECIFICATIONS:

CNPP FSE 98-006 SPECIFICALIONS:

The automatic extinguishing system must meet precise specifications for speed and efficiency.



FM 6050 (FACTORY MUTUAL):

International insurance and accreditation body for fire protection equipment (through UL) and advice to companies. FM 6050 approval results in a 10 minutes fire resistance for safety cabinets according to the NFPA 251-1969 temperature curve.



NF EN ISO 1182:

The thermal insulation in the cabinet walls is non-flammable.

CHOOSE YOUR CABINET ACCORDING TO YOUR SECTOR OF ACTIVITY AND THE LEVEL OF FLAMMABILITY OF YOUR PRODUCTS:

FP (Flash point) ⁽¹⁾	Level of flammability	Examples of products	Recommended safety cabinets In industry
highter 55°C	little FLAMMABLE	Domestic fuel, diesel	Range 1, 2
Between 21°C and 55°C	FLAMMABLE	Turpentine, white spirit	Range 3030, 7030, 1 , 2 , 3
Between 0°C and 21°C	EASILY FLAMMABLE	Ethanol, toluEne	Range 790+, 2 , 5

(1) FP (flash point): the minimum temperature at which, under specified test conditions, a liquid emits sufficient gas to ignite momentarily in the presence of an ignition source.







SAFETY CABINETS WITH EXTINGUISHERS FOR FLAMMABLE PRODUCTS



Fume hoods, filtering

Flammable cabinets





AMS20







▲ AMS200

CDVA **COMPLIANCE**

- · Compliant with CNPP FSE 98-006 specifications.
- Standardized warning labels in accordance to ISO 3864, ISO 7010 standards and to the European directive 92/58/EEC.

ADVANTAGES

- Large containment sump on the AMS100 and AMS200 models.
- CO2 fire extinguisher with automatic activation in case of fire.
- · Sloping roof to prevent unauthorised storage.

PASSIVE SAFETY

- 15/10th steel construction.
- Epoxy paint as standard:
- · Beige RAL 1013 for models AMS10 and AMS20,
- Yellow RAL 1023 for models AMS100 and AMS200.
- · Standardized «Flammable» symbol.
- · 3 adjustable perforated shelves on racks (except AMS10 and AMS20, one shelf, not height adjustable).
- · Containment sump integrated in the lower part with drain plug.

ACTIVE SAFETY

- Equipped with a CO2 extinguisher.
- · 120 g for the AMS10 and AMS20 models,
- 500 g for models AMS100 and AMS200.
- · Automatic triggering of the extinguisher by thermal bulb between 65° C and 72° C.
- Top and bottom side vents Ø 100 mm with flame arrestor grid (except AMS10 and AMS20).
- Double swing doors (except AMS10 and AMS20, one door).
- · Self-closing doors.
- · Key lock.

OPTIONS

- · Additional shelf for AMS100 and AMS200.
- Spare CO2 extinguisher.
- · Cabinets also available without CO2 extinguisher.
- Absorbent mats to be placed at the bottom of the Containment sump (packs of 10 sheets, reference JF10D).
- · Ventilation or filtration boxes.
- 1 To improve the longevity and safety of your cabinet, we recommend connecting it to a forced ventilation system. For more information, please see the ventilation section of this catalogue and do not hesitate to contact us.

P/N	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Delivered with a CO ₂ extinguisher	Storage (L)	Retention(L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)	
AMS10	455 x 500 x 250	260 x 490 x 220	120 g	10	10	1	20	12	
AMS20	500 x 700 x 250	260 x 695 x 230	120 g	20	15	1	25	20	
AMS100	1500 x 800 x 400	1250 x 780 x 370	500 g	100	112	2	50	70	
AMS100SE	1500 X 600 X 400	1230 X 760 X 370	non	100	112	3	50	70	
AMS200	1800 x 1000 x 400	1530 x 980 x 370	500 g	200	130	3	75	101	
AMS200SE	1000 % 1000 % 400	1550 X 960 X 570	non	200	150	3	/5	101	
ESAMS1	30 x 780 x 370		Additional shelf for	AMS100 and Al	MS100SE		50	8	
ESAMS2	30 x 980 x 370			75	10				
EX120G	Replacement CO ₂ ex	tinguisher for AMS10		-	0,2				
EX500G	Replacement CO ₂ ex	tinguisher for AMS10	0 and AMS200				-	0,6	







FM SAFETY CABINETS FOR FLAMMABLE PRODUCTS





Thermo-fuse closing (based on model)



Adjustable shelves



Continuous piano hinge



Integrated locking handle



Vent with built-in flame arresters



Liquid tight containment sump



Stacking cabinets



Recirculating air box

COMPLIANCE

- · Complies with NFPA (National Fire Protection Association)
- Occupational Safety and Head Administration (OSHA) and Factory Mutual International (FM) specifications.

ADVANTAGES

- · Very robust construction.
- · Integrated door handle.
- · Self-closing cabinets, with a preponderance of wings and doors held open by thermofuses that are active at 74°C.
- · Continuous hinges ensure excellent door retention.
- Many models available.

PASSIVE SAFETY

- · Double-walled steel construction (38 mm air space).
- · Yellow epoxy paint.
- · Height adjustable shelves on racks.
- $\boldsymbol{\cdot}$ Containment sump integrated at the bottom of the cabinet (height 50 mm).
- · Fixing point for earthing.

ACTIVE SAFETY

- Top and bottom ventilation holes (Ø 50 mm) with flame arrestor grid.
- · Continuous door hinges.
- · Hinged doors with manual or automatic closing.
- · Three-point locking.
- · Key lock.

OPTIONS

- · Additional shelves.
- Absorbent mats to be placed at the bottom of the Containment sump (packs of 10 sheets reference JF10D).
- · Ventilation or filtration boxes.
- · 7 Some Series 2 FM safety cabinets are stackable with Series
- 4. For more information, please contact us.
- 8 Benefit from labopur® technology on your safety cabinet thanks to the labopur housing whose ventilation/filtration system and filter adsorption capacity have been tested and approved to the NF X 15-211 standard of May 2009.







P/N	Closing of the doors	Description	External dim. H x W x D (mm)	Internal Dim. H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
MB04J	Manual	Under-bench cabinet with	610 x 430 x 430	470 x 349 x 349	15	6	1	159	26
SB04J	Automatic	1 door	010 X 430 X 430	470 X 343 X 343	13	Ů	'	139	28
MB12J	Manual	Counter cabinet with 1 door	960 x 610 x 460	775 x 508 x 370	45	10	1	159	50
SB12J	Automatic	counter cubinet with 1 door	300 X 010 X 400	773 X 300 X 370	43	10	,	133	51
ES12	-		Addition	nal shelf for 45L cal	oinet			-	3
MB18J	Manual	Under-bench cabinet with	610 x 1090 x 460	515 v 1005 v 390	64	20	1	159	58
SB18J	Automatic	2 doors	010 X 1030 X 400	313 X 1003 X 330	04	20	, i	133	60
ES18J	-		Additional shelf for 64L cabinet						
MB22J	Manual	Tall cabinet with 1 door	1650 v 585 v 460	1537 x 508 x 370	83	10	3	159	86
SB22J	Automatic	Tan cabinet with 1 door	1030 X 303 X 400	1337 X 300 X 370	03	10	3	139	88
ES22J	-		Addition	nal shelf for 83L cal	oinet			-	2
MB30J	Manual	Counter cabinet with 2	1120 x 1090 x 460	1006 x 1003 x 370	113	20	1	159	88
SB30J	Automatic	doors							99
ES30J	-		Addition	al shelf for 113L ca	binet			-	4
MC45J	Manual	Tall cabinet with 2 doors	1650 x 1090 x 460	1537 x 1003 x 370	170	20	2	159	121
SC45J	Automatic								123
ES45J	-		Addition	al shelf for 170L ca	binet			-	4
MC60J	Manual	Tall cabinet with 2 doors	1650 x 860 x 860	1537 x 781 x 771	228	30	2	159	149
SC60J	Automatic	run cubinet with 2 doors	1030 X 000 X 000	1337 X 701 X 771	220	50		133	151
ES60J	-			-	8				
MC90J ⁽¹⁾	Manual	Tall cabinet with 2 doors	1650 x 1090 x 860	1537 v 1003 v 771	340	40	2	159	177
SC90J ⁽¹⁾	Automatic	rail cabiliet with 2 doors	1030 X 1030 X 000	1337 X 1003 X 771	370	70		133	179
ES90J ⁽¹⁾	-		Addition	al shelf for 340L ca	binet			-	10

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SAFETY CABINETS FOR TOXIC, NOXIOUS OR FLAMMABLE PRODUCTS







Ventilation outlet with fire damper (depending on model)





Reinforced hinges

Lockable doors





Adjustbale retention shelves

Removable containment sump (depending on model)

COMPLIANCE

- Non-flammable insulating panels, classified A1 according to NF EN ISO 1182, between the walls.
- Fireproof construction certified EI 15 min type A1, according to NF EN 13501-1.
- Standardized warning labels in accordance to ISO 3864, ISO 7010 standards and with European Directive 92/58/EEC.

ADVANTAGES

- · Large storage capacity.
- Cabinets allowing to store different families of products (harmful, toxic and flammable) while keeping a homogeneity of your storage.

PASSIVE SAFETY

- Double wall 12/10 steel construction.
- Mineral fibre insulation 20 mm thick in accordance to NF EN ISO 1182.
- White epoxy paint RAL 9010.
- Standardized symbols "noxious", "toxic" or "flammable" (to be specified when ordering).
- · Adjustable retention shelves on racks.

ACTIVE SAFETY

- Ventilation by means of an internal side duct with opening at the top and bottom (Ø 100 mm).
- · Roof ventilation outlet with connection sleeve (Ø 100 mm).
- Swing doors with manual closing reinforced hinges.
- Two-points locking.
- · Key lock.

OPTIONS

- · Additional shelf (G03, G04 or G06).
- PVC top shelf (EP03, EP04 or EP06).
- Steel containment sump (GL03, GL04 or GL06).
- PVC containment sump (BP03, BP04 or BP06).
- · Absorbent mat (JF10D).
- To improve the longevity and safety of your cabinet, we recommend connecting it to a forced ventilation system. For more information, please contact us.

EXCLUSIVE FEATURES OF THE SERIES 5

- · Containment sump at the bottom (height 100 mm).
- Automatic closing of the doors thanks to a hydraulic door closer with a preponderance of wings.
- · Self-closing valve with fuse at ventilation outlet.

EXCLUSIVE OPTIONS TO THE 5 SERIES

- Locking of the doors in open position, with automatic thermoregulated closing preset at 70°C.
- · Additional shelf (G03, G04 or G06).
- PVC over-shelf (EP03, EP04 or EP06).
- PVC containment sump (BP03, BP04 or BP06).
- · Absorbent mat (JF10D).
- To improve the longevity and safety of your cabinet, we recommend connecting it to a forced ventilation system. For more information, please contact us.













Lithium-ion cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments File cabinets

Showers and firstaid equipments









RANGE 3

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
SV50	Low cabinet depth 450 mm	750 ⁽¹⁾ x 1000 x 450	650 x 950 x 400	50	1	75	62
G803G	Low cabinet depth 300 mm	895 x 1000 x 300	745 x 950 x 250	70	1	75	58
G804G	Low cabinet depth 450 mm	895 x 1000 x 450	745 x 950 x 400	100	1	75	68
G806G	Low cabinet depth 600 mm	895 x 1000 x 600	745 x 950 x 550	135	1	75	82
G1204E	Counter cabinet depth 450 mm	1295 x 1000 x 450	1145 x 950 x 400	150	3	75	92
G2004B	Tall cabinet depth 450 mm	2095 x 1000 x 450	1945 x 950 x 400	250	5	75	145
G2006B	Tall cabinet depth 600 mm	2095 x 1000 x 600	1945 x 950 x 550	300	5	75	166

RANGE 5

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
S604	Under-bench cabinet depth 450 mm	750 ⁽¹⁾ x 1000 x 450	650 x 950 x 400	50	1	75	69
S804T	Low cabinet depth 450 mm	895 x 1000 x 450	745 x 950 x 400	100	1	75	75
S806T	Low cabinet depth 600 mm	895 x 1000 x 600	745 x 950 x 550	135	1	75	90
S1204T	Counter cabinet depth 450 mm	1295 x 1000 x 450	1145 x 950 x 400	150	3	75	99
S2004T	Tall cabinet depth 450 mm	2095 x 1000 x 450	1945 x 950 x 400	250	5	75	152
S2006T	Tall cabinet depth 600 mm	2095 x 1000 x 600	1945 x 950 x 550	300	5	75	174

ACCESSORIES

2004B	Tull Cubille	et depth 450 mm	5	75	145					
32006B	Tall cabine	t depth 600 mm	2095 x 1000 x 600	1945 x 950 x 550	300	5	75	166		
		300 3 75								
ANGE	5									
P/N		Description External dim. H x W x D (mm) H x W x D (mm) External dim. H x W x D (mm) Storage (L) Number of shelves shelf (kg)								
S604	Under-ber	nch cabinet depth 450 mm	750 ⁽¹⁾ x 1000 x 450	650 x 950 x 400	50	1	75	69		
S804T	Low cabin	et depth 450 mm	895 x 1000 x 450	745 x 950 x 400	100	1	75	75		
S806T	Low cabin	et depth 600 mm	895 x 1000 x 600	745 x 950 x 550	135	1	75	90		
S1204T	Counter ca	abinet depth 450 mm	1295 x 1000 x 450	1145 x 950 x 400	150	3	75	99		
S2004T	Tall cabine	et depth 450 mm	2095 x 1000 x 450	1945 x 950 x 400	250	5	75	152		
S2006T	Tall cabine	et depth 600 mm	2095 x 1000 x 600	1945 x 950 x 550	300	5	75	174		
ACCESS	ORIES									
	ORIES /N			Description			v	Veight (kg)		
P		Additional shelf for G803G		Description			V			
P/ G	/N	Additional shelf for G803G Extra shelf for SV50-G804G-G	1204E-G2004B-S604T-S1				V	(kg)		
P. G G	/N 03						V	(kg)		
P/ G G G	/N 03 04	Extra shelf for SV50-G804G-G					V	(kg) 3 4		
P/ G G G EP	03 04 06 03 004	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804	9-S806T-S2006T G-G1204E-G2004B-S604	204T-S2004T			V	(kg) 3 4 5		
P/ G G G EP	/N 03 04 06 003	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G	9-S806T-S2006T G-G1204E-G2004B-S604	204T-S2004T			V	3 4 5 6		
PA G G G EP EP GI	/N 03 04 06 06 003 004 006 000 000 000 000 000 000 000 000	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for C	3-S806T-S2006T G-G1204E-G2004B-S604 S806T-S2006T G803G	204T-S2004T T-S1204T-S2004T			V	3 4 5 6 6 6 4		
PA G G G EP EP GI GI	/N 03 04 06 003 004 006 000 000 000 000 000 000 000 000	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for S	3-S806T-S2006T G-G1204E-G2004B-S604 S806T-S2006T G803G V50-G804G-G1204E-G20	204T-S2004T T-S1204T-S2004T	00 4 T		V	(kg) 3 4 5 6 6 6 4 5		
P/ G G G EP EP GI GI	/N 03 04 06 06 003 004 006 003 004 006 003 004 006 003 004 006 008 008 008 008 008 008 008 008 008	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for G Steel Containment sump for G	G-G1204E-G2004B-S604 S806T-S2006T G803G V50-G804G-G1204E-G20 G806G-G2006B-S806T-S2	204T-S2004T T-S1204T-S2004T	00 4 T			(kg) 3 4 5 6 6 4 5 6		
PA G G G EP EP GI GI BP	/N 03 04 06 003 004 006 003 004 006 003 004 006 003 004 006 003 004 006 003 000 000 000 000 000 000 000 000	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for G Steel Containment sump for G	3-S806T-S2006T G-G1204E-G2004B-S604 S806T-S2006T 5803G SV50-G804G-G1204E-G20 5806G-G2006B-S806T-S2	204T-S2004T T-S1204T-S2004T 004B-S604T-S1204T-S20			V	(kg) 3 4 5 6 6 4 5 6 3		
PA G G G EP EP GI GI BB	/N 03 04 06 003 004 006 003 004 006 003 004 006 000 000 000 000 000 000 000 000	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for G Steel Containment sump for G PVC Containment sump for G PVC Containment sump for S	G-G1204E-G2004B-S604 S806T-S2006T G803G SV50-G804G-G1204E-G20 G806G-G2006B-S806T-S2 B03G /50-G804G-G1204E-G20	204T-S2004T T-S1204T-S2004T 004B-S604T-S1204T-S20				(kg) 3 4 5 6 6 6 4 5 6 3 4		
PA G G G EP EP GI GI BP BP	/N 03 04 06 003 004 006 003 004 006 003 004 006 003 004 006 003 004 006 003 000 000 000 000 000 000 000 000	Extra shelf for SV50-G804G-G Extra shelf for G806G-G2006E PVC over-shelf for G803G PVC over-shelf for SV50-G804 PVC Shelf for G806G-G2006B- Steel Containment sump for G Steel Containment sump for G	G-S806T-S2006T G-G1204E-G2004B-S604' S806T-S2006T G803G sV50-G804G-G1204E-G20 G806G-G2006B-S806T-S2 B03G sV50-G804G-G1204E-G20 B06G-G2006B-S806T-S20	204T-S2004T T-S1204T-S2004T 2004B-S604T-S1204T-S20 2006T 204B-S604T-S1204T-S20 2006T	04T			(kg) 3 4 5 6 6 4 5 6 3		

NFX prEN 15-211 17242













labopur® RECIRCULATING AIR BOX











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▲ H50+ + CORG51

▲ H50+S + CORG51 (filter change)

OPERATING PROCESS

Take advantage of **labopur®** technology onto any cabinet. The electric fan allows the extraction of harmful and toxic vapors from your cabinet. They are purified as they pass through the active charcoal filter and then released into the atmosphere without harming the environment.

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested and approved to NF X 15-211 - May 2009.
- · Electrical fan conforms to CE specifications.

ADVANTAGES

- Labopur® technology.
- Adaptable to any cabinet, 3 connection possibilities.
- · Solution without civil engineering, simple and aesthetic assembly.
- · Indicator light for ventilation system operation.
- Window for checking the presence of the filter adapted to your needs
- High efficiency active charcoal filter specialised and treated according to the products stored, tested to NF X 15-211 - May 2009.
- Anti-dust filter, 92% efficiency against particles < 3 µm.
- · Easy replacement of the active charcoal filter.
- FILTRALARME 5 interface with touch screen for ergonomic hood management.
- 5 languages available: French English German Spanish Italian
- · Automatic airflow regulation.
- Airflow and hour meter displayed simultaneously.
- Date of installation of filters and filter types indicated and visible during operation.

DIGITAL SCREEN (H50+S)

- Measures airflow velocity (0.4- 0.6 m/s) and thus detects and alerts you with an audible and visual signal about filter clogging or any airflow anomaly.
- In compliance with standard NF X 15-211. The automatic airflow regulator (0.4-0.6 m/s) analyzes airflow speed in real time and checks that the hood is operating at negative pressure.

TECHNICAL CHARACTERISTICS

- · 12/10th steel construction.
- White RAL 9010 and blue RAL 5015 epoxy paint.
- Silent electric fan, 43 dB(A) (excluding air flow), 220-240 volts 20 watt - 0,1 A - flow rate 86 m3/h - IP54 protection.
- Suction diameter: Ø 100 mm.

OPTIONS

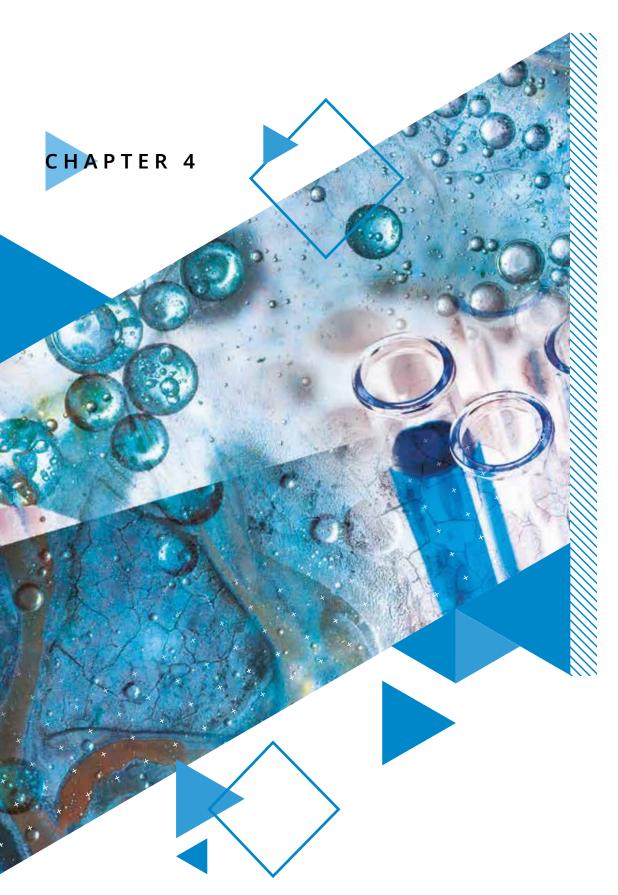
- Active charcoal filter: boxes are delivered without active charcoal filter.
- You must select one from the table below according to the types of products you store.
- Filter saturation level control by REACTIVE TUBES: Control port on the side of the cabinet.
- Hole for introduction of specialized reagent tubes. Use of a hand
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.
- Connection kit option (KRC):
 - Allows easy connection of an Air Box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of Ø 100 mm flexible hose, ref. KL100.
- 2 clamps Ø 100 mm, ref. CDS100.

REMINDER: We also propose specific type of filters for specific applications. Filters must be changed at least once a year.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
H50+	Recirculating air box (delivered without filter)	310 x 510 x 485	15
H50+S	Recirculating air box with filtralarme 5 (supplied without filter)	310 x 510 x 485	15
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	8
CORG51	Polyvalent active charcoal filter ⁽¹⁾ for corrosive and organic vapors	70 x 390 x 390	9
FOR50	Active charcoal filter for formaldehyde vapors	70 x 390 x 390	9
CAR50	Kit to use recycling air box without filter	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	10 organic test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" and 5 "corrosive" test tubes	-	0,1
KRC	Connection kit for box	-	1

(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents. composés organic ou solvants.

SAFETY CABINETS FOR CORROSIVE PRODUCTS (ACIDS & BASES)





Range 4



Range 8A



Range 8B



Range 8E

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SAFETY CABINETS FOR THE STORAGE **OF CORROSIVE PRODUCTS (ACIDS & BASES)**

GENERAL

For safety reasons, corrosive products (acids and bases) must be stored in safety cabinets to avoid any risk of leakage or breakage of a bottle. You should also make sure that you separate Acids from Bases when storing them. Some of the cabinets in this catalogue are divided into compartments, allowing incompatible products to be stored in the same cabinet.

This catalogue offers you different storage solutions for your corrosive products according to your safety requirements. Whatever your field of activity (workshop, laboratory, storage warehouse, production unit, etc.), if you store products that are little to very corrosive, you must store them in safety cabinets. Do not hesitate to contact us for a quick and personalized advice.

What is an anti-corrosion cabinet?

There are two main types of cabinets for storing corrosive products. The first type, intended for the storage of low-corrosive products, consists of safety cabinets made of steel. These cabinets have high-density polyethylene or PVC overlay protection on the shelves and the containment sump. The second type, intended for the storage of highly concentrated and therefore very corrosive products (nitric, sulphuric, hydrochloric, hydrofluoric acids, etc.), consists of cabinets made of high density polyethylene or cellular PVC. These corrosionresistant materials offer perfect resistance to corrosive vapors and liquids.

Is forced ventilation necessary?

Forced ventilation is very important for metal safety cabinets in order to extend their life span. Despite the use of high quality steel and paint, nothing can prevent acids from corroding a metal enclosure over time. Furthermore, for the well-being of the users, it is strongly recommended to ventilate the cabinet, whether it is made of steel or anti-corrosion material, in order to evacuate a possible formation of dangerous fumes in the cabinet. We therefore invite you to consult our different solutions in terms of forced ventilation (external rejection, filtration with active charcoal filter...) in order to find the one adapted to your needs. Do not hesitate to contact us for any further information.

STANDARDIZATION

FM (FACTORY MUTUAL):



International insurance and accreditation body for safety equipment and advice to companies.

STANDARD NF X 15-211 - May 2009:



NFX Concerns the quality of ventilation and filtration as well as the quality of containment of recirculating air fume hoods intended for 5-211 the handling of chemicals in laboratories.



VENTILATION OF YOUR CABINET

Necessary accessory to optimize the security of your cabinet.

We highly recommend to add a ventilation or filtration box to your safety cabinet. The box allows to adsorb stagnating vapors trapped and to renew the air within the cabinet ultimately avoiding internal over heating.



FM SAFETY CABINETS FOR CORROSIVE PRODUCTS(1)



◀ B22SJ

COMPLIANCE

Complies with NFPA (National Fire Protection Association)
OSHA (Occupational Safety and Head Administration) and FM (Factory Mutual international) specifications.

ADVANTAGES

- · Very robust construction.
- · Integrated door handle.
- Self-closing cabinets (2), with a preponderance of wings.
- Continuous hinges ensure excellent door retention.
- Many models available.

PASSIVE SAFETY

- · Double-walled steel construction (38 mm air space).
- Blue epoxy paint.
- Height adjustable shelves on racks with high density polyethylene (HDPE) overlay.
- Containment sump integrated at the bottom of the cabinet (height 50 mm) with overprotection in high density polyethylene (HDPE).

- · Fixing point for earthing.
- The B24M and B24S cabinets are equipped with a high density polyethylene (HDPE) worktop.

ACTIVE SAFETY

- Top and bottom ventilation holes (Ø 50 mm) with flame arrestor grid.
- Continuous door hinges.
- · Hinged doors with manual or automatic closing.
- · Three-points locking.
- · Key lock.

OPTIONS

- · Additional shelves.
- Absorbent mats to be placed at the bottom of the retention bin containment sump (packs of 10 sheets reference JF10D).
- · Ventilation or filtration boxes.

P/N	Closing of the doors	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	HDPE Protections	Max. load per shelf (kg)	Weight (kg)
B04M	Manual	559 x 432 x 432	465 x 345 x 360	15	6	1	2	75	26
B22M	Manual	1651 v 501 v 457	1560 v 500 v 200	86	10	3	4	75	86
B22S	Self-closing	1651 x 591 x 457	1560 x 500 x 390	80	10	3	4	/5	88
ESP22	-		Addition	al shelf for 86 li	tre cabinet			-	4
B24M	Manual	910 x 890 x 560	710 x 795 x 455	90	18	1	2	75	92
B24S	Self-closing	910 X 890 X 500	/ 10 X /95 X 455	90	10	'	2	/5	95
ESP24	-		Additional shelf for 90 litre cabinet						
B30M	Manual	1118 x 1092 x 457	1025 x 1005 x 390	113	20	1	2	75	99
B30S	Self-closing	1116 X 1092 X 457	1025 X 1005 X 390	113	20		2	/5	99
ESP30	-		Additiona	al shelf for 113 l	itre cabinet			-	4
B45M	Manual	1651 x 1092 x 457	1560 x 1005 x 390	170	20	2	3	75	121
B45S	Self-closing	1051 X 1092 X 457	1500 X 1005 X 590	170	20	Z	3	/5	123
ESP45	-		Additiona	al shelf for 170 l	itre cabinet			-	4
B60M	Manual	1651 x 864 x 864	1560 x 770 x 780	228	30	2	3	75	149
B60S	Self-closing	1001 X 804 X 804	1300 X //0 X /80	228	50	Z	3	/5	151
ESP60	-		Addition	nal shelf for 228 li	tre cabinet				8

(1)Cabinets not suitable for the storage of very corrosive products: nitric, sulphuric, hydrochloric acids... and must be connected to forced ventilation for a better longevity. Refer to Range 8.A and 8.B cabinets for very aggressive products and to Range V for forced ventilation.
(2) Depending on model.

um-ion Fume hoods, filtering

cabinets

Corrosive cabinets

Toxic cabinets and Multirisk

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SAFETY CABINETS FOR DANGEROUS PRODUCTS FIRST ECO-DESIGNED CABINET 100% RECYCLABLE







▲ APC103+

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ECO-DESIGN AND OUR RESPONSIBLE PRACTICES

Eco-design is a key concept for building a sustainable and environmentally friendly future. This approach aims at integrating environmental considerations from the design of products, to minimize their impact on the environment. Eco-design has several benefits for companies, consumers and the planet by reducing the consumption of natural resources. It can also improve the quality of products by using sustainable and ecological materials.

Ecosafe has been committed to a responsible approach for 50 years. Today we wanted to materialize our action in the design of this first product that accompanies our CSR policy.

Ecosafe launches the first series of cabinets for the storage of dangerous products with a **100% recycled** structure. This cabinet is also **100% recyclable!** All components can be fully recycled or reused for a new purpose.



We encourage the **recycling** of our active charcoal filters



We use **recycled/recyclable materials packaging** and raw materials



The structure of the cabinet is built with 100% recycled materials from the transformation of refrigerators









Corrosive cabinets

and Multirisk







▲ APC63+

Secondary compartment

Sliding rails with new stop system



RECYCLABILITY CHARACTERISTICS

- Cabinet structure is built with 100% recycled materials
- · Polystyrene 100% recyclable
- Blue tray and slide in Polypropylene: 100% recyclable
- Secondary tray in PVC: 100% recyclable
- · Aluminum handle: 100% recyclable
- Glass insert 100% recyclable
- Exterior metal screws 100% recyclable
- Pictogram vegan stickers

COMPLIANCE

Standardized pictograms in accordance with ISO 3864, ISO 7010 and NF X 08.003 standards, and with the European directive 92/58/CFF.

BENEFITS

- · Specially designed for the storage of acids and bases.
- · Compartmentalized cabinets for the separation of acids and bases (except for the APC33+ model, either acids or bases).

PASSIVE SAFETY

- 100% recycled and recyclable polystyrene construction.
- · Standardized «Acids» and «Bases».

- · Sliding retention shelves/bins with stopper in each main compartment.
- Independent compartments (except for APC33+) for the storage of acids, bases.
- · Manufactured from high rigidity plastics, the 8E series cabinets are durable, waterproof and hygienic.
- Each cabinet is divided into a main compartment and a secondary compartment (except for the APC63+, APC113+ and APC223+ models).

ACTIVE SAFETY

- Top and bottom ventilation holes with Ø 100 mm sleeve for possible connection.
- · Doors with key lock:
- · hinged for models APC33+ and APC93+.
- sliding for models APC63+, APC113+ and APC223+.
- · Jack feet for leveling.

OPTIONS

92/58/CE • Compli BENEF • Specially • Compar bases (e PASSIV • 100% re	es with recommendati	on for risk page of acide for the sendel, either polystyrene	orevention and s and bases. eparation of a er acids or bas	• Doors v • hinged • sliding • Jack fee OPTIC ③ Labop Benefit fi the labo adsorptic	ONS OUR H50 recircity our H50 recircity our housing was	C63+, APC113- ulation air box technology on whose ventilat ve been tested	+ and APC223+.	m and filte	
P/N	External dimensions H x W x D	Number of	compartments	Number /of contain	of shelves ment sump	Storage capacity	Containment capacity	Load capacity per shelf	Weight (kg)
	(mm)	Principal	Secondary	Principal	Secondary	(L)	(L)	(kg)	(Ny)
APC33+	630 x 635 x 603 ⁽²⁾	1	1	2	2	40	28	20	45
APC63+	630 x 1135 x 603 ⁽²⁾	2	-	4	-	72	44	20	75
APC93+	1900 x 635 x 615	2	2	6	6	120	84	20	115
APC113+	1100 x 1135 x 615	2	-	6	-	100	66	20	125
					_				
APC103+	1900 x 635 x 615	3	3	5	5	108	70	20	83
APC103+ APC223+	1900 x 635 x 615 1900 x 1135 x 615	2	-	8	-	108 144	70 88	20 20	83 180





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CORROSION RESISTANT SAFETY CABINETS FOR ACIDS & BASES





COMPLIANCE

- Standardized warning labels in accordance with ISO 3864, ISO 7010 standards, and to European directive 92/58/EEC.
- Complies with recommendation for risk prevention and safety.

ADVANTAGES

- $\boldsymbol{\cdot}$ Specially designed for the storage of acids and bases.
- Cellular PVC construction offering perfect resistance to the aggression of corrosive vapors and liquids.
- Compartment divided cabinets for the separation of acids and bases (except for the APC31+ model, either acids or bases).

PASSIVE SAFETY

- White cellular PVC construction.
- · Standardized «Acids», «Bases» and «Toxics» labels (APC106+ only).
- Sliding shelves/tanks with stopper in each main compartment.
- Independent compartments (except for APC31+) for the storage of acids, bases and toxic products (only for APC106+).
- Each cabinet is divided into a main compartment and a secondary compartment (except for models APC61+, APC111+ and APC221+).

ACTIVE SAFETY

 Top and bottom ventilation holes with Ø 100 mm sleeve for possible connection.

H50C + CORG51

· Lockable doors:

Secondary compartment

• Hinged for models APC31+, APC91+ and APC106+.

New slide rails with

drawer stop

- sliding for models APC61+, APC111+ and APC221+.
- · Levelling feet for levelling.

OPTIONS

3 labopur® H50 air recirculation air box:

• Benefit from the labopur® technology on your safety cabinet thanks to the labopur® housing whose ventilation/filtration system and filter adsorption capacity have been tested and approved to the NF X 15-211 standard of May 2009.

D/N	External dim. P/N H x W x D	Number of compartments		No. of sl Containm	No. of shelves/of Containment sumps		Containment	Load capacity per shelf	Weight
T/N	(mm)	Principal	Secondary	Principal	Secondary	capacity (L)	capacity (L)	(kg)	(kg)
APC31+	630 x 635 x 603 ⁽¹⁾	1	1	2	2	40	28	20	31
APC61+	630 x 1135 x 603 ⁽¹⁾	2	-	4	-	72	44	20	60
APC91+	1900 x 635 x 615	2	2	6	6	120	84	20	90
APC111+	1100 x 1135 x 615	2	-	6	-	100	66	20	110
APC106+	1900 x 635 x 615	3	3	5	5	108	70	20	83
APC221+	1900 x 1135 x 615	2	-	8	-	144	88	20	155
E8A2	Additional sliding retain	ner shelf				20	11	20	6



CORROSION RESISTANT SAFETY CABINETS FOR ACIDS & BASES











Secondary compartment



New slide rails with drawer stop

Corrosive ng obligations. 01/2024

H50C + CORG51

COMPLIANCE

- · Standardized warning labels in accordance with ISO 3864, ISO 7010 standards, and with European directive 92/58/EEC.
- · Complies with recommendation for risk prevention and safety.

ADVANTAGES

- · Specially designed for the storage of acids and bases.
- · Melamine construction offering perfect resistance to the aggression of vapors and corrosive liquids(1).
- · Compartmentalised cabinets for the separation of acids and bases (except for the APC32+ model, either acids or bases).

PASSIVE SAFETY

- · Melamine construction.
- · Standardized symbols for «Acids», «Bases» and «Toxics» (APC107+
- Sliding shelves/tanks with stopper in each main compartment.
- Independent compartments (except for APC32+) for the storage of acids, bases and toxic products (only for APC107+).

· Each cabinet is divided into a main compartment and a secondary compartment (except for models APC62+, APC112+ and APC222+).

ACTIVE SAFETY

- Top and bottom ventilation holes with Ø 100 mm sleeve for possible connection.
- · Lockable doors:
- Hinged for models APC32+, APC92+ and APC107+.
- sliding for models APC62+, APC112+ and APC222+.
- · Levelling feet for levelling.

OPTIONS

3 labopur® H50 air recirculation air box:

• Benefit from the labopur® technology on your safety cabinet thanks to the labopur® housing whose ventilation/filtration system and filter adsorption capacity have been tested and approved to the NF X 15-211 standard of May 2009.

External dim. P/N H x W x D	HxWxD			No. of shelves/of Containment sumps		Containment	Load capacity per shelf	Weight		
	(mm)	Principal	Secondary	Principal	Secondary	capacity (L)	capacity (L)	(kg)	(kg)	
APC32+	630 x 635 x 603 ⁽²⁾	1	1	2	2	40	28	20	42	
APC62+	630 x 1135 x 603 ⁽²⁾	2	-	4	-	72	44	20	75	
APC92+	1900 x 635 x 615	2	2	6	6	120	84	20	115	
APC112+	1100 x 1135 x 615	2	-	6	-	100	66	20	125	
APC107+	1900 x 635 x 615	3	3	5	5	108	70	20	120	
APC222+	1900 x 1135 x 615	2	-	8	-	144	88	20	180	
E8A2	Additional sliding retain	er shelf				20	11	20	6	

(1) Melamine is still sensitive to corrosive liquids. It is imperative to store acid and base bottles in the polypropylene containers provided for this purpose. In the event of a liquid spill, the melamine must be cleaned as soon as possible.
(2) Depth with connecting sleeve at the rear. Depth without connection sleeve: 578 mm

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Flammable

NFX prEN 15-211 17242













labopur® RECIRCULATING AIR BOX











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▲ H50+ + CORG51

▲ H50+S + CORG51 (filter change)

OPERATING PROCESS

Take advantage of **labopur®** technology onto any cabinet. The electric fan allows the extraction of harmful and toxic vapors from your cabinet. They are purified as they pass through the active charcoal filter and then released into the atmosphere without harming the environment.

COMPLIANCE

- Adsorption capacity of active charcoal filters and filtration system tested and approved to NF X 15-211 - May 2009.
- Electrical fan conforms to CE specifications.

ADVANTAGES

- Labopur® technology.
- Adaptable to any cabinet, 3 connection possibilities.
- · Solution without civil engineering, simple and aesthetic assembly.
- · Indicator light for ventilation system operation.
- Window for checking the presence of the filter adapted to your needs
- High efficiency active charcoal filter specialised and treated according to the products stored, tested to NF X 15-211 - May 2009.
- Anti-dust filter, 92% efficiency against particles < 3 µm.
- · Easy replacement of the active charcoal filter.
- FILTRALARME 5 interface with touch screen for ergonomic hood management.
- 5 languages available: French English German Spanish -Italian.
- · Automatic airflow regulation.
- Airflow and hour meter displayed simultaneously.
- Date of installation of filters and filter types indicated and visible during operation.

DIGITAL SCREEN (H50+S)

- Measures airflow velocity (0.4- 0.6 m/s) and thus detects and alerts you with an audible and visual signal about filter clogging or any airflow anomaly.
- In compliance with standard NF X 15-211. The automatic airflow regulator (0.4-0.6 m/s) analyzes airflow speed in real time and checks that the hood is operating at negative pressure.

TECHNICAL CHARACTERISTICS

- · 12/10th steel construction.
- · White RAL 9010 and blue RAL 5015 epoxy paint.
- Silent electric fan, 43 dB(A) (excluding air flow), 220-240 volts 20 watt 0,1 A flow rate 86 m3/h IP54 protection.
- Suction diameter: Ø 100 mm.

OPTIONS

- Active charcoal filter: boxes are delivered without active charcoal filter.
- You must select one from the table below according to the types of products you store.
- Filter saturation level control by REACTIVE TUBES: Control port on the side of the cabinet.
- Hole for introduction of specialized reagent tubes. Use of a hand pump.
- Detection of the efficiency or saturation of the active charcoal filter by reading the tubes.
- Connection kit option (KRC):
 - Allows easy connection of an Air Box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of Ø 100 mm flexible hose, ref. KL100.
- 2 clamps Ø 100 mm, ref. CDS100.

REMINDER: We also propose specific type of filters for specific applications. Filters must be changed at least once a year.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
H50+	Recirculating air box (delivered without filter)	310 x 510 x 485	15
H50+S	Recirculating air box with filtralarme 5 (supplied without filter)	310 x 510 x 485	15
ORG50	Active charcoal filter for organic vapors	70 x 390 x 390	8
CORG51	Polyvalent active charcoal filter ⁽¹⁾ for corrosive and organic vapors	70 x 390 x 390	9
FOR50	Active charcoal filter for formaldehyde vapors	70 x 390 x 390	9
CAR50	Kit to use recycling air box without filter	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	10 organic test tubes	-	0,1
TRAC	10 "corrosive" test tubes	-	0,1
TROA	5 "organic" and 5 "corrosive" test tubes	-	0,1
KRC	Connection kit for box	-	1

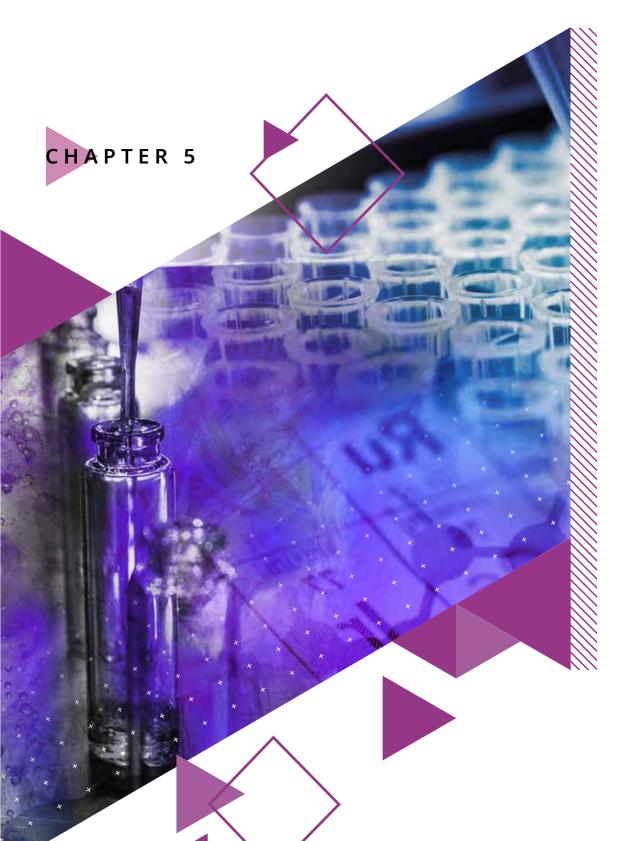
(1) CORG multipurpose active charcoal filters can adsorb the vast majority of commonly used products: corrosive products, organic compounds or solvents. composés organic ou solvants.

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SAFETY CABINETS FOR TOXIC PRODUCTS & MULTIRISK CABINETS



Range 13





Range 16L



Range 16E



Range 14D



Range 14



Range 3030M



Range 790+M









SAFETY CABINETS FOR TOXICS AND MULTIRISK SAFETY CABINETS

GENERAL

For obvious safety reasons (fire, explosion, corrosion, poisoning), all dangerous products must be handled and stored with the utmost care.

This part of the catalog offers you solutions for the storage of your hazardous products according to your safety requirements. Whether you are a workshop, a laboratory, a warehouse, a production unit or a company department, if you store hazardous products such as toxic, harmful, flammable, corrosive, polluting, etc., you must store them safely. Do not hesitate to contact us for a quick and personal advice. You will find below a reminder of the regulations and the main recommendations concerning the storage of these products.

STANDARDIZATION

Public health (related to toxics)

Toxics and poisonous chemicals must be stored in a specific place equipped with key closing.

Recommendation (related to different families of chemicals)

Non compatible chemicals must be stored in separate cabinets or compartments.

Environment (related to pollutants)

Each chemical liable to pollute water or soil must be stored with a retention tank.

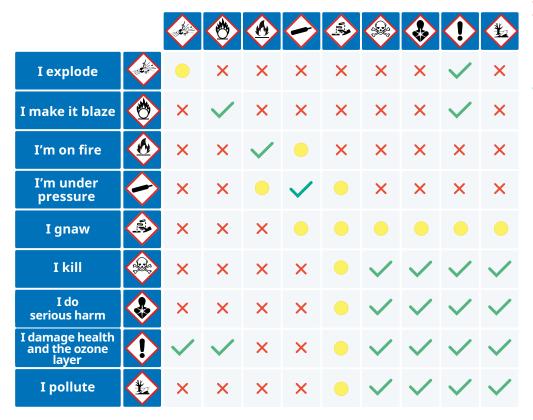
EN

EUROPEAN STANDARD EN14470-1 (concerns flammable products in the laboratory):

Flammable products stored in the laboratory must be stored in one or more cabinets with a minimum fire resistance of 15 minutes.

4 fire classifications are required: 15, 30, 60 and 90 minutes.

CHOOSE YOUR CABINET ACCORDING TO YOUR PRODUCTS AND THE INCOMPATIBILITIES BETWEEN THEM



For the storage of your highly corrosive products (nitric, sulphuric, hydrochloric acids, etc.), we recommend our Range 11+ cabinets or our Range 8A cabinets. For more information on the latter, consult the section of our catalogue devoted to cabinets for corrosive products.

Cannot be stored together

Can be stored together under some conditions © ECOSAFE reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 10/2023

Can be stored together







Fume hoods, filteri

Flammable

SAFETY CABINETS FOR TOXIC PRODUCTS AND MULTIRISK SAFETY CABINETS



▲ MF2







▲ MF4 + MF1

COMPLIANCE

- Complies with articles R.5132-66 and R. 5132-68 of the Public Health Code.
- Complies with recommendation for risk prevention and safety.
- Standardized labels in accordance with ISO 3864, ISO 7010 standards, and with European Directive 92/58/EEC.

ADVANTAGES

- Integrated electric fan.
- Large storage capacity.

PASSIVE SAFETY

- 10/10 steel construction.
- White epoxy paint RAL 9010.
- Standardized «toxic» or «noxious» warning labels (to be specified when ordering).
- \cdot 3 retention shelves, adjustable in height on racks.
- Removable Containment sump at the bottom of the cabinet, height 100 mm.

ACTIVE SAFETY

- Integrated electric fan: 220-240 volts 0.1 A 18 W; 90 m3/h flow rate; IPX4 protection; 37.5 Lp dB(A) sound level (3m).
- Double hinged door with 3 points locking system and key lock.

OPTIONS

- Additional shelf.
- PVC retention shelf.
- Pull-out drawer.
- · Poison box, see below.

POISON CHESTS

Can be used as wall cabinets to store your hazardous materials or as poison boxes in MF4 safety cabinets.

- Made of 10/10 steel.
- White epoxy paint RAL 9010.
- «Toxic» Standardized symbol in accordance with ISO 3864, ISO 7010 and NF X08.003 standards and directive 92/58/EEC.
- Height adjustable shelves on racks: 2 for the MF1 model; 4 for the MF2 model.
- Hinged door with key lock.
- · Possibility of wall mounting.
- Possibility of assembling the models together.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
MF1	Poison Chest 12 L	380 x 470 x 205	370 x 460 x 170	12	-	2	10	10
MF2	Poison box 19 L	580 x 470 x 205	570 x 460 x 170	19	-	4	10	15
MF4	Cabinet with fan	1975 x 1000 x 500	1920 x 980 x 480	250	60	3	50	100
MF4SV	Cabinet without fan	1975 x 1000 x 500	1920 x 980 x 480	250	60	3	50	100

Toxic cabinets and Multirisk

Containment

and cans

Anti-fire equipments

Showers and firstaid equipments





SAFETY CABINETS FOR PHYTOSANITARY PRODUCTS



▲ AL57







▲ AL157

▲ AL307

COMPLIANCE

- In accordance with the legislation :
- Articles R.5132-66 and R.5132-68 of the Public Health Code.
- · Article 4 of decree n° 87-361 of 27 May 1987 concerning the protection of workers.
- Standardized labelling in accordance with ISO 3864 standard, and with European Directive 92/58/EEC.

ADVANTAGES

- · Allows the storage of your phytosanitary products in complete safety and in compliance with the legislation.
- · Recommended for the storage of herbicides, fungicides, insecticides and other plant protection products.
- · Recommended for farmers, breeders, wine growers, landscapers, horticulturists, agricultural cooperatives, green spaces, communities...

PASSIVE SAFETY

- 8/10th steel construction.
- Grey RAL 7035 electrostatic powder coating.
- Steel retention shelf, 50mm high, adjustable in height on a rack in 25mm increments (admissible load per shelf evenly distributed: 30 or 60kg).
- Steel Containment sump, 50mm high at the bottom of the cabinet.
- Complete Standardized labelling : including «toxic products» symbol and personal protective equipment symbols.

ACTIVE SAFETY

- Top and bottom ventilation holes on the sides.
- · Hinged door(s) with key lock.

OPTIONS

- · Additional steel shelf/Containment sump.
- PVC over-shelf/Containment sump.
- Perforated cover plate for containment sump.
- · Absorbent mat.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
AL57	1 door counter cabinet	1000 x 500 x 420	930 x 480 x 390	70	20	2	30	26
AL117	2 door counter cabinet	1000 x 920 x 420	930 x 900 x 390	135	40	2	60	40
AL157	1 door tall cabinet	1800 x 500 x 420	1730 x 480 x 390	130	40	4	30	41
AL307	2 doors tall cabinet	1800 x 920 x 420	1730 x 900 x 390	240	80	4	60	60
ESAL305	Containment shelf/ sump for 2 doors cabinet	65 x 900 x 375	-	-	20	-	-	6
SEAL305	Containment shelf/ sump in PVC for 2 doors cabinet	-	-	-	20	-	-	3
JF10D	Absorbent mats, small and large widths (pack of	10 sheets)						1





SAFETY CABINETS FOR PESTICIDE





- In accordance with the legislation :
- Standardized labelling in accordance with ISO 3864, ISO 7010 standards, and to the European directive 92/58/CEE.



ADVANTAGES

- · Allows the storage of your phytosanitary products in complete safety and in compliance with the legislation.
- Recommended for the storage of herbicides, fungicides, insecticides and other plant protection products.
- · Recommended for farmers, breeders, wine growers, landscapers, horticulturists, agricultural cooperatives, green spaces, communities...

PASSIVE SAFETY

- 7/10th steel construction, frame and doors.
- Grey epoxy paint RAL 7035.
- · Complete Standardized labelling: including «toxic products» symbol and personal protective equipment symbols.
- · 4 shelves/Containment sumps (height 50 mm), 3 of which are adjustable in height on racks.

ACTIVE SAFETY

- Top and bottom ventilation holes in the sides.
- Hinged door(s) with key lock.

OPTIONS

- · Additional steel shelf/Containment sump.
- · Absorbent mats.

PASSIVE SAFETY

- · Robust one-piece steel construction:
- Frame: 8/10th steel construction.
- Doors: 7/10th steel construction.
- Green epoxy paint RAL 6011.
- Complete Standardized labelling: including «toxic products» symbol and personal protective equipment symbols.
- 4 shelves/Containment sumps (height 50 mm), 3 of which are adjustable in height on racks.

ACTIVE SAFETY

- · Top and bottom ventilation holes in the sides.
- · Hinged door(s) with key lock.

OPTIONS

- · Additional shelf/Containment sump (ref: ESE150 or ESE300 depending on model).
- Galvanized perforated cover plate for the shelves/Containment sumps (ref: CE150 or CE300 depending on model).
- · Absorbent mat (ref: JF10D).
- · Drilling for connection to a forced ventilation system (ref.: AZVENT), supplied with a Ø 100 mm sleeve (must be ordered with

			• Drillir AZVE		ction to a force	ed ventilation sy sleeve (must be o	
P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Containment capacity (L)	Volume (m³) Ext. / Int.	Load capacity per shelf ⁽¹⁾ (kg)	Weight (kg)
APK152	Plant protection cabinet kit 1 door	1800 x 500 x 422	1680 x 475 x 352	40	0,4 / 0,3	50	33
APK302	Plant protection cabinet kit 2 doors	1800 x 916 x 422	1680 x 891 x 352	80	0,7 / 0,5	50	55
AC150	1 door pesticide cabinet	1950 x 500 x 500	1840 x 498 x 453	40	0,5 / 0,4	80	55
ESE150	Additional shelf for AC150	50 x 488 x 443	-	10	-	80	3
CE150	Perforated cover plate for ESE150	50 x 483 x 438	-	-	-	80	5
AC300	Plant protection cabinet with 2 doors	1950 x 930 x 500	1840 x 928 x 453	80	0,9 / 0,8	80	90
ESE300	Additional shelf for AC300	50 x 918 x 443	-	20	-	80	6
CE300	Perforated cover plate for ESE300	50 x 913 x 438	-	-	-	80	10
AZVENT	Hole for connection to forced ventilation	system (must be orde	ered with the cabinet)		-	-
JFD10	Option Set of 10 absorbent sheets					-	1

ISO 1182









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«UNDER-BENCH» SAFETY CABINETS



with European Directive 92/58/EEC.





ACTIVE SAFETY

- Top and bottom ventilation holes Ø 100 mm.
- · Automatically closing hinged door (except **1** SV50, manual closing).
- Key lock.
- · Levelling feet (except **1**SV50).

ADVANTAGES

COMPLIANCE

- · Complies with recommendation for risk prevention and safety.
- Possibility of connecting the different models together (e.g. acids + solvents, see table) except for the SV50 model.

· Non-flammable insulating plates classified A1 according to NF EN

· Standardized warning labels according to ISO 3864, ISO 7010 and

· Specially designed to be placed under the bench.

ISO 1182, between the walls for the SV50 model.

· Fan in compliance with CE specifications (optional).

PASSIVE SAFETY

- 15/10th steel construction except SV50, 12/10th steel construction + 20 mm mineral fibre insulation.
- Doors made of 15/10th steel, double-walled, except u SV50, doors made of 12/10th steel + 20 mm mineral fibre insulaton.
- Epoxy paint: yellow RAL 1023 (solvents); blue RAL 5015 (acids); white RAL 9010 (solvents, sases and toxic substances).
- Labelling with Stondardizedoymbols.
- Adjustable steel retention shelf (corrosive models equipped with retention rack in PVC)
- Removable steel containment sump (height: 100 mm) at the bottom of the cabinet (models for acids are equipped with a PVC containment sump); optional containment sump for the SV50 model.

OPTIONS

All cabinets (except SV50J):

- · 4 swivel castors, 2 of which are lockable (ref: 4 RPV).
- Electric ventilator (for sacid, sbase and stoxic models): 220-240 volts 18 W 0.1 A 37.5 Lp dB(A) (3 m) flow rate 90 m3/h IPX4 protection complies with standard IEC 62.18 (ref.: M100/4).
- Control box with indicator light and flow rate dimmer for M100/4 fan (ref.: BCDE).

SV50J only:

 SECURITY+ kit including automatic door closure and fire damper for the ventilation outlet.

RECOMMENDATIONS: The AC30 model is not suitable for the storage of very corrosive products (nitric, sulphuric, hydrochloric acids, etc.) and must be connected to a forced ventilation system for better durability. Please refer to our catalogue section for the storage of corrosive products (Range 8A ref. APC31 and APC61). For the storage of flammable products in the laboratory please refer to the flammable section of EN 14470-1.

	P/N	External dimensions H x W x D (mm)	Internal dimensions H x W x D (mm)	Storage capacity (L)	Retention capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
0	SV50 (solvents)	750** x 1000 x 450 **Height without headband : 670 mm	650 x 950 x 400	50	42	1	75	62
	GL04	Option bac de rétention	en acier pour SV50					5
0	SV30 (solvents)	670 x 550 x 500	650 x 530 x 470	30	28	1	50	30
3	AC30 (acids)	670 x 550 x 500	650 x 530 x 470	30	28	1	50	30
4	BA30 (bases)	670 x 550 x 500	650 x 530 x 470	30	28	1	50	30
9	TO30 (toxic)	670 x 550 x 500	650 x 530 x 470	30	28	1	50	30
8+0	AB60 (acids+bases)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
3+2	AS60 (acids+solvents)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
0+0	BS60 (bases+solvents)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
3+3	AT60 (acids+toxics)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
0+6	BT60 (bases+toxics)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
2+6	ST60 (solvents+toxics)	670 x 1100 x 500	(2x) 650 x 530 x 470	60 (2x 30)	56 (2x 28)	2	50	60
0+0+0	ABS90 (acids+bases+solvents)	670 x 1650 x 500	(3x) 650 x 530 x 470	90 (3x 30)	84 (3x 28)	3	50	90
0+0+0+6	ABST120 (acids+bases+solvents+toxic)	670 x 2200 x 500	(4x) 650 x 530 x 470	120 (4x 30)	112 (4x 28)	4	50	120
	4ROU	4 castors, 2 of which are	lockable (cabinet height wit	h castors 745 m	m)		-	1
	M100/4	Integrated 90m3/h fan -		-	1			
	BCDE	M100/4 fan control box v		-	1			







SAFETY CABINETS FOR DANGEROUS PRODUCTS









Cabinets available in 4 different colors and 4 different and in 4 sizes

▲ AZ50

COMPLIANCE

- · Complies with recommendation for risk prevention and safety.
- Standardized warning labels according to ISO 3864 and ISO 7010 standards, and with European Directive 92/58/EEC.

ADVANTAGES

- · Allows the storage of your hazardous products in complete safety and in compliance with legislation.
- · Economical solution for storing your hazardous products.
- · Supplied with 4 warning labels: «Corrosive» (x2), «Toxic» and «Flammable» (to be affixed according to your use).
- · Work surface of the counter cabinets (ref. AZ50 and AZ110) covered by a rubber mat.

ACTIVE SAFETY

- Top and bottom ventilation holes in the doors.
- · Hinged door(s) with 110° opening angle.
- · 3 points key lock.

PASSIVE SAFETY

- One-piece steel construction.
- Epoxy paint:
- Body grey RAL 7035; Door(s) yellow RAL 1023.
- · Body grey RAL 7035; Door(s) red RAL 3000.
- · Body grey RAL 7035; Door(s) blue RAL 5010.
- · Body grey RAL 7035; Door(s) green RAL 6011.
- · Shelves / containment sumps 50 mm high, height-adjustable on racks in 15 mm increments.
- · Load capacity per level, evenly distributed, max. 80 kg.
- · maximum per level.
- · Standardized warning labels for «Flammable», «Corrosive» and «Toxic» products.

OPTIONS

- · Additional shelf (ref.: ESE150 and ESE300).
- Galvanized perforated cover plate for shelves / containment sumps (ref.: CE150 and CE300).
- Drilling for connection to a forced ventilation system (ref.:AZVENT), supplied with a \emptyset 100 mm sleeve (must be ordered with the cabinet).

	P/	'N		Description	External dim.	Storage	Containment	Number of	Weight
Yellow	Red	Blue	Green	Description	H x W x D (mm)	capacity (L)	capacity (L)	shelves	(kg)
AZ50	AZ50R	AZ50B	AZ50V	Counter cabinet with 1 door	Ext.: 1000 x 500 x 500 Int.: 890 x 498 x 453	80	20	2	26
AZ110	AZ110R	AZ110B	AZ110V	Counter cabinet with 2 doors	Ext.: 1000 x 930 x 500 Int.: 890 x 925 x 453	155	40	2	43
AZ150	AZ150R	AZ150B	AZ150V	Tall cabinet 1 door	Ext.: 1950 x 500 x 500 Int.: 1840 x 498 x 453	150	40	4	55
AZ300	AZ300R	AZ300B	AZ300V	Tall cabinet 2 doors	Ext. : 1950 x 930 x 500 Int. : 1840 x 925 x 453	300	80	4	73
ESE150	Shelf / base	through for	AZ50 and A	Z150	50 x 488 x 443	-	10	-	3
CE150	Perforated (cover plate f	or AZ50 and	AZ150	50 x 483 x 438	-	-	-	5
ESE300	Shelf / base	through for	AZ110 and	AZ300	50 x 915 x 443	-	20	-	6
CE300	Perforated o	cover plate fo	or AZ110 and	1 AZ300	50 x 913 x 438	-	-	-	10
AZVENT	ZVENT Hole for ventilation connection		-	-	-	-	-		

Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

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SAFETY CABINETS FOR DANGEROUS PRODUCTS





COMPLIANCE

- · Complies with recommendation for risk prevention and safety.
- Standardized warning labels according to ISO 3864 and ISO 7010 standards, and to European Directive 92/58/EEC.

ADVANTAGES

- Allows the storage of your hazardous products in complete safety and in compliance with the regulations in force.
- Economical solution for the storage of your hazardous products.
- Supplied with 4 Standardized warning labels: «flammable» (x1), «toxic» (x1) and «corrosive» (x2).

PASSIVE SAFETY

- · 8/10th steel construction.
- Electrostatic powder coating in grey RAL 7035 (or yellow RAL 1023 only for the AL300J model).
- Steel retention shelf, 50mm high, adjustable in height on a rack in 25mm increments.
- Steel containment sump, 50mm high at the bottom of the cabinet.
- Standardized warning labels: «flammable» (x1), «toxic» (x1) and «corrosive» (x2).

ACTIVE SAFETY

- $\boldsymbol{\cdot}$ Top and bottom ventilation holes on the sides.
- · Hinged door(s) with key lock.

OPTIONS

- Additional steel shelf / containment sump.
- PVC over-shelf / containment sump.
- Absorbent mat.

We remind you that these cabinets are not suitable for storing highly corrosive products (nitric, sulphuric, hydrochloric acids, etc.). Please contact us for the range of cabinets best suited to your needs.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)
AL55	1 door counter cabinet	1000 x 500 x 420	930 x 480 x 390	70	20	2	30	26
AL115	2 door counter cabinet	1000 x 920 x 420	930 x 900 x 390	135	40	2	60	40
AL155	Tall cabinet 1 door	1800 x 500 x 420	1730 x 480 x 390	130	40	4	30	41
AL305	Tall cabinet 2 doors	1800 x 920 x 420	1730 x 900 x 390	240	80	4	60	60
AL305J	Tall yellow cabinet 2 doors	1800 x 920 x 420	1730 x 900 x 390	240	80	4	60	60
ESAL155	Containment shelf / sump for 1 door cabinet	65 x 480 x 375	-	-	10	-	-	3
ESAL305	Containment shelf / sump for 2 doors cabinet	65 x 900 x 375	-	-	20	-	-	6
SEAL305	Containment shelf / sump in PVC for 2 doors cabinet	-	-	-	20	-	-	3
CAL305	Perforated cover plate for shelf / sump for 2 doors cabinet							6
JF10D	Absorbent mats, small and large widths (set of 10	sheets)						1





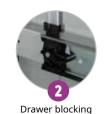


SAFETY CABINETS WITH SLIDING DRAWERS FOR DANGEROUS PRODUCTS









system



ALT305 ▶





COMPLIANCE

- In accordance with articles R.5132-66 and R.5132-68 of the Public Health Code
- · Complies with recommendation for risk prevention and safety.
- Standardized warning labels according to NF X08.003, ISO 3864 and ISO 7010 standards, and with European Directive 92/58/EEC.

ADVANTAGES

- Sliding drawers for an easy access to the stored products.
- · Drawers are locked in the retracted position when a drawer is already pulled out.
- · Possibility of wall mounting.
- · Supplied with 4 Standardized warning labels: «flammable» (x1), «toxic» (x1) and «corrosive» (x2).

PASSIVE SAFETY

- 8/10th steel construction.
- Grey RAL 7035 electrostatic powder coating.
- · 3 steel drawers, 50mm high, mounted on sliding rails (load capacity per shelf evenly distributed: 30 to 50 kg).
- · Steel containment sump at the bottom of the cabinet, 80 mm high, mounted on sliding rails.
- · Standardized warning labels: «flammable» (x1), «toxic» (x1) and «corrosive» (x2) to be affixed as required.

ACTIVE SAFETY

- · Top and bottom ventilation holes.
- · Hinged door(s) with key lock, integrated handle.

OPTIONS

· Absorbent matting.

P/N	Description	Dimensions H x W x D (mm)		Storage capa- city (L)	Containment capacity (L)	Number of shelves	Load capacity per shelf (kg)	Weight (kg)	
ALT155	1 door tall cabinet with drawers	1950 x 500 x 500	1718 x 379 x 430	150	40	4	30	72	
ALT305	2 doors tall cabinet with drawers	1950 x 916 x 500	1718 x 795 x 430	300	85	4	50	102	
JF10D	JF10D Absorbent mats, small and large widths (set of 10 sheets)								

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MODULAR MULTIRISK SECURITY CABINETS









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COMPLIANCE

- Complies with recommendation for risk prevention and safety.
- Standardized warning labels according to ISO 3864, ISO 7010 standards, and with European Directive 92/58/EEC.

ADVANTAGES

- Separation by families of dangerous products.
- · Modular solution for the storage of your hazardous products.
- · Compartments can be arranged on request.
- Models can be assembled together (except for the AB56); models A1T, A2T, A3T and A4T can only be assembled together).

PASSIVE SAFETY

- 10/10 steel construction.
- White polyester paint RAL 9010.
- · Standardized warning labels.
- · Steel retention shelves, adjustable in height on racks.
- Steel Containment sump, removable at the bottom of each compartment.
- Glass surface in polymetacrylate PMMA.

ACTIVE SAFETY

- · Top and bottom ventilation:
- Air inlet with grid at the bottom of the doors,

- Roof outlet Ø 100 mm for possible connection except
- Model AB56/AS56SV, outlets at the rear of the enclosure.
- Hinged doors with lock, except type A1T, door/drawer on sliding rails with lock.

OPTIONS

- PVC equipment for «corrosive» compartment including PVC retention shelves and PVC containment sump.
- · Additional shelves.
- · Absorbent mat (reference: JF10D).

AB56* ventilated under-bench cabinet with 2 compartments: 2 uipped as standard with an electric fan in the right-hand compart-

ment (230 volts - 50 Hz - 40 Watts - 0.19 A - 54 dB(A), excluding air flow - flow rate of 150 m3/h - IP44 protection - \emptyset 100 mm outlet) as well as a shelf and a PVC Containment sump.

 $\,$ N.B.: The compartment equipped with the fan is not suitable for the storage of flammable products and other solvents.

*Reference for model without fan: AB56SV

Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.















mmable abinets

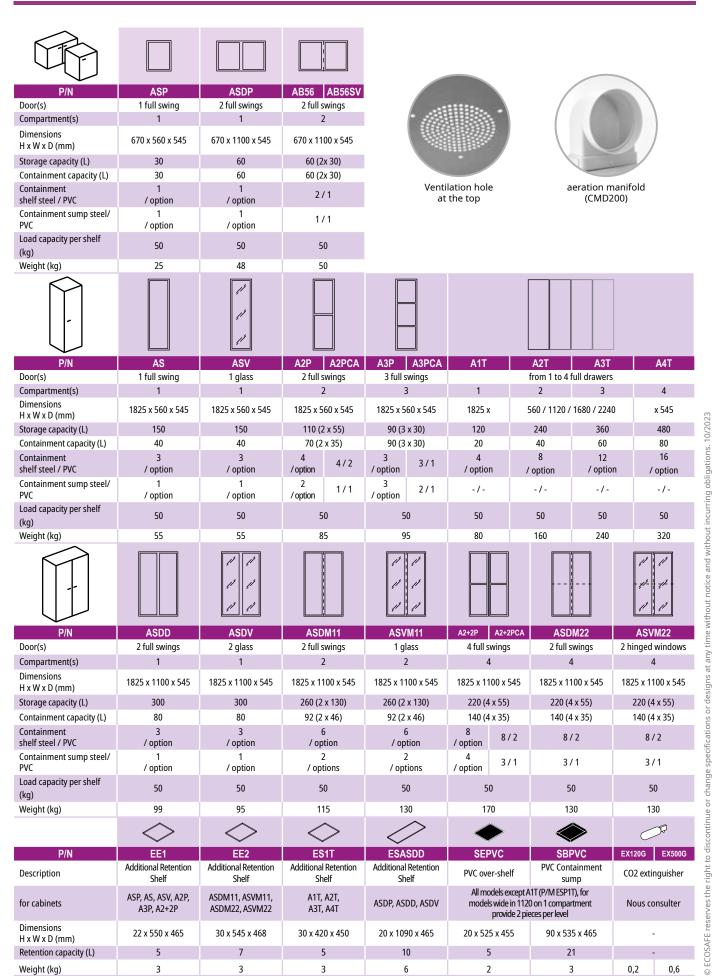
Corrosive

Toxic cabinets and Multirisk

Containment and cans

File cabinets Anti-fire equipments

Showers and first- | aid equipments | A



EN 14470-1

















30 MINUTES MULTIRISK CABINETS - EN 14470-1 & FM





Standardized labeling



Self-closing doors with thermo-fuse



Adjustable leveling feet



Shelves retention



Moving by pallet truck



Perforated cover plate for base through (option)

COMPLIANCE

- Tested and approved 30 minutes according to EN 14470-1 and EN 1363-1.
- Tested and approved for 10 minutes according to FM 6050 (Factory Mutual International).
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves)
- Standardized warning labels according to ISO 3864 and ISO 7010, NF X08.003, Directive 92/58/EEC, EN 14470-1 and FM specifications.

ADVANTAGES

- 30 minutes fire resistance according to the ISO 834 standard curve.
- Base with cover for easy movement by pallet truck, when empty, except for the «under-cabinet» models.
- Self-closing cabinets, with a preponderance of wings and doors held open by thermofuses that activate at 47°C.
- Many models available.
- Suitable for all types of chemicals commonly used in the laboratory and industry.
- Separation of dangerous products by families. Complies with recommendation for risk prevention and safety.

PASSIVE SAFETY

- Insulated panel construction offering high resistance to chemical attack
- Light grey RAL 7035 frame with yellow RAL 1023 plated fields.

- Signage with Standardized symbols.
- Height-adjustable retention shelves with a 32 mm pitch.
- Removable containment sump at the bottom.

ACTIVE SAFETY

- Ventilation holes Ø 100 mm for possible connection.
- Self-closing doors with preponderance of the wings.
- System for keeping doors open with automatic closing in the event of fire.
- Ventilation ducts with thermofusible system to isolate the contents of the cabinet in the event of fire.
- · 3 points key lock.
- Lock with anti-spark lock.
- · Levelling feet.
- Thermo-expanding door seals.

OPTIONS

- · Additional shelf.
- Perforated cover plate for containment sump.
- · Sliding drawer / Containment sump.
- PVC covers.
- Ventilation or filtration boxes.
- Absorbent mats to be placed at the bottom of the containment sump (packs of 10 sheets reference JF10D).















Fume hoods, filtering

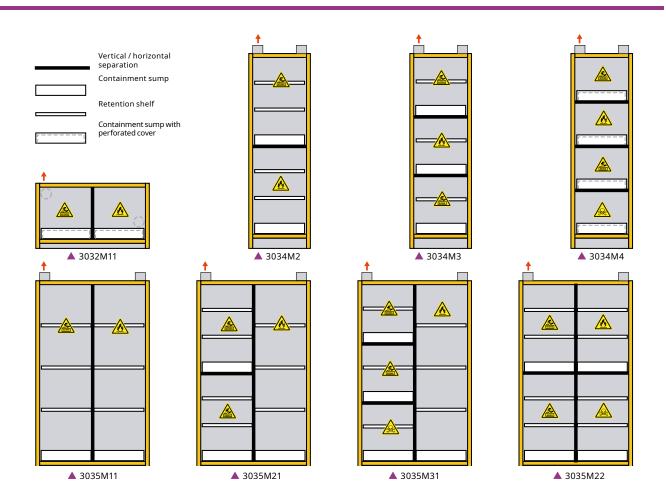
cabinets - Ventilation

cabinets

Flammable

Corrosive

cabinets



PRE-EQUIPPED CABINETS

D/N	P/N Description		Compartment type and storage capacity (L) ⁽¹⁾			External dim.	E	quipped w	<i>i</i> ith	Load capacity	Weight	
P/N	Description		A	A		H x W x D (mm)	Steel shelf	contain- ment sump	Steel perforated cover plate	per shelf (kg)	(kg)	
3032M11	Under-bench cabinet, 2 doors, 2 compartments	28	28	-	-	635 x 1115 x 630	-	2	2	30	108	
3034M2	1 door tall cabinet with 2 compartments	55	55	-	-	1980 x 605 x 550	4	2	option	30	126	
3034M3	1 door tall cabinet with 3 compartments	30	30	-	30	1980 x 605 x 550	3	3	option	30	129	
3034M4	1 door tall cabinet with 4 compartments	22	22	22	22	1980 x 605 x 550	-	4	4	30	142	
3035M11	2 doors tall cabinet with 2 compartments	120	120	-	-	1980 x 1115 x 550	6	2	option	30	232	
3035M21	2 doors tall cabinet with 3 compartments	120	55	-	55	1980 x 1115 x 550	7	3	option	30	241	
3035M31	2 doors tall cabinet with 4 compartments	120	28	28	28	1980 x 1115 x 550	6	4	option	30	244	
3035M22	2 doors tall cabinet with 4 compartments	55	55	55	55	1980 x 1115 x 550	8	4	option	30	252	

⁽¹⁾ The layout of the compartments may be modified according to your needs.

ACCESSORIES

P/N	Description	External dim. H x W x D (mm)	Weight (kg)
E48	Containment shelf in steel (except for 3032M11)	30 x 490 x 410	3
B148	Containment sump	100 x 480 x 410	5
C148	Perforated cover plate in steel	90 x 460 x 395	5
T148	Drawer / self retracting shelf in steel	80 x 420 x 380	6
SE148	PVC containment shelf	30 x 485 x 405	2
SB148	PVC containment sump	100 x 485 x 405	3

Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

Showers and firstaid equipments

Anti-fire equipments File cabinets

EN

















MULTI-HAZARD CABINETS - EN 14470-1 - 105 MINUTES





Standardized labeling



Self-closing door(s) with thermo-fuse



Key locking system



Containment shelf



Moving by pallet truck



Removable base through

COMPLIANCE

- Tested and approved to EN 14470-1 and EN 1363-1.
- Standardized warning labels according to ISO 3864 and ISO 7010, Directive 92/58/EEC and EN 14470-1.
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).
- Complies with articles R5132-66 and R5132-68 of the Public Health Code (multirisk models).

ADVANTAGES

- Fire resistance of 105 minutes according to the ISO 834 standard curve.
- · Fire tested and approved by an independent European laboratory.
- Separation of dangerous products by families in accordance with recommendation for risk prevention and safety.

PASSIVE SAFETY

- Double wall construction:
- External walls in 12/10th steel, coated with white epoxy paint RAL 9010
- Internal walls in white RAL 9010 melamine.
- Thermal insulation panels between the walls to limit thermal bridges.
- Removable containment sump in the lower part.

- · Standardized labeling.
- Containment shelves.
- Fixing point for earthing.

ACTIVE SAFETY

- \bullet Ventilation holes with Ø 100 mm ventilation outlet for possible connection.
- Ventilation ducts with thermofusible system to isolate the contents of the enclosure in the event of fire.
- Thermo-expanding door seals.
- · Self-closing doors with key lock.
- Door hold-open system with automatic closing system thermoregulated at 47°C.

OPTIONS

- Possibility of colored doors on models 794+M and 795+M: White frame and shelf RAL 9010; yellow door(s) RAL 1023.
- · Code lock (1 per door).



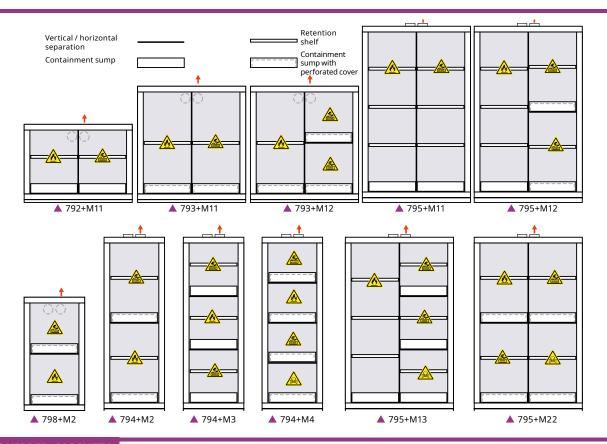












PRE-EQUIPPED CABINETS

D/N	Description			ent type pacity (External		Weight		
P/N						dimensions H x W x D (mm)	Steel shelf	Steel containment sump	Steel perforated cover plate	(kg)
792+M11	2 doors under-counter cabinet with 2 compartments	28	28	-	-	630 x 1137 x 570 ⁽¹⁾	2	2	option	194
793+M11	2 doors counter cabinet with 2 compartments	55	55	-	-	1100 x 1137 x 670 (2)	2	2	2	311
793+M12	2 doors counter cabinet with with 3 compartments	55	28	28	-	1100 x 1137 x 670 (2)	1	3	3	317
798+M2	1 door counter cabinet with 2 compartments	28	28	-	-	1100 x 635 x 670 (2)	-	2	2	221
794+M2	1 door tall cabinet with 2 compartments	55	55	-	-	1950 x 635 x 620 (3)	2	2	2	304
794+M3	1 door tall cabinet with 3 compartments	30	30	30	-	1950 x 635 x 620 (3)	3	3	option	307
794+M4	1 door tall cabinet with 4 compartments	22	22	22	22	1950 x 635 x 620 (3)	-	4	4	320
795+M11	2 doors tall cabinet with 2 compartments	120	120	-	-	1950 x 1137 x 620 (3)	6	2	option	477
795+M12	2 doors tall cabinet with 3 compartments	120	55	55	-	1950 x 1137 x 620 (3)	5	3	2	486
795+M13	2 doors tall cabinet with 4 compartments	120	28	28	28	1950 x 1137 x 620 (3)	6	4	option	489
795+M22	2 doors tall cabinet with 4 compartments	55	55	55	55	1950 x 1137 x 620 (3)	4	4	4	497

ACCESSORIES

P/N	Description	External dim. H x W x D (mm)	Weight (kg)
E1	Retention rack for 1 door cabinet type 792+M11	30 x 485 x 285	3
B1	Containment sump for 1 door cabinet type 792+M11	100 x 480 x 315	3
C1	Perforated cover plate for 1 door cabinet type 792+M11	90 x 470 x 305	3
E48	Retention rack for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	30 x 490 x 410	3
B48	Containment sump for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	100 x 480 x 410	4
C148	Perforated cover plate for Containment sump for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	90 x 460 x 395	3
T148	Pull-out drawer/retainer for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	80 x 420 x 380	6
SE48	PVC shelf for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	30 x 485 x 405	2
SB48	PVC Containment sump for cabinets 793+M1x, 798+M2, 794+Mx, 795+Mxx	100 x 485 x 405	3

Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

cabinets

Flammable cabinets

Corrosive

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⁽¹⁾ Depth with connecting sleeve at the rear. Depth without sleeve: 520 mm (2) Depth with connecting sleeve at the rear. Depth without sleeve: 620 mm (3) Height with connecting sleeve above. Height without sleeve: 1900 mm



















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MULTI-HAZARD CABINETS - EN 14470-1 - TYPE 90 MINUTES

COMPLIANCE

- \bullet Compartment for flammable products tested and approved to EN 14470-1 and FM 6050.
- · Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves)
- · Standardized warning labels according to ISO 3864, ISO 7010, EN 14470-1 and NF X08.003, and European Directive 92/58/EEC.

ADVANTAGES

- · Separation by families of hazardous products in accordance to the public health code (article R.5132-68).
- · Fire tested and approved by an independent laboratory.
- · Compartments for corrosive products made of cellular PVC or melamine (anti-corrosion materials).

TECHNICAL CHARACTERISTICS

Storage in 4 separate compartments with centralised roof ventilation Ø 100 mm for possible connection:

Flammable products» compartment EN 14770-1:

- Double wall construction: outer wall in 15/10th steel; inner wall in H.P.L. (high pressure laminate).
- Thermal insulation panels between the walls to eliminate thermal bridaes.
- White epoxy paint RAL 9010.
- · Standardized flammable labeling.
- · Fixing point for earthing.
- Ventilation holes with Ø 100 mm ventilation outlet for possible connection.
- · Ventilation ducts with thermo-fusible system to isolate the interior of the enclosure in the event of fire.
- Thermo-expanding door seals.
- · Door with automatic 2 points locking and automatic locking by self-locking pin.
- · Key lock.
- · Door holding system in open position with automatic closing preset at 50°C.
- 3 height-adjustable retention shelves.
- 1 removable Containment sump at the bottom.

Acid» compartment:

- · Construction in white cellular PVC or melamine.
- · Standardized acids labeling
- Top and bottom ventilation holes.
- · Hinged glass door with key lock.
- · 2 shelves/Containment sumps mounted on sliding rails with stopper.
- 1 shelf/Containment sump.



Base compartment:

- · White cellular PVC or melamine construction.
- Standardized bases labeling
- Top and bottom ventilation holes.
- · Hinged glass door with key lock.
- 1 shelf/Containment sump.

Toxic products» compartment:

- · White cellular PVC or melamine construction.
- · Standardized toxics labeling.
- · Top and bottom ventilation holes.
- · Hinged glass door with key lock.
- 1 shelf/Containment sump.

OPTIONS

- · Additional shelf and perforated cover plate
- · Additional shelf for secondary compartments.

P/	P/N Fire resistance		External Dimensions H x W x D		Details of the main compartments					
Acids/Bases/Toxics compartment		in minutes of the flammable		Weight (kg)	Description	Internal dimen- sions	Storage capacity	Containment	Number of	Number of compartments
Cellular PVC version	Melamine version	compartment	(mm)		Description	H x W x D (mm)	(L)	capacity (L)	shelves	secondary
		105	2205 x 1270 x 615	395	Inflammables	1620 x 490 x 410	105	17	4	-
MR9+	MR9B+			390	Acides	870 x 467 x 540	55	51	3	2
IVIT				385	Bases	420 x 467 x 540	25	17	1	1
				380	Toxiques	420 x 467 x 540	25	17	1	1
E4	48	-	30 x 490 x 410	3	Additional reten	tion shelf for the f	lammable cor	mpartment		
C1	48	-	90 x 460 x 395	4	Perforated cover	r plate for contain	ment sump fo	r flammable c	ompartment	
E8	A2	-	84 x 457 x 482	6	Additional shelf/l	holding tank for ac	id/base/toxic o	compartments		

Refer to the table of chemical incompatibilities and precautions for use, to validate the configuration of your cabinet according to your needs.

designs at any time without notice and without incurring obligations.



SAFETY CABINETS FOR THE STORAGE OF HEALTHCARE **AND INFECTIOUS WASTES**









WHAT THE LAW SAYS

- · Waste from healthcare and similar activities must be separated from other wastes as soon as it is produced.
- · When the quantity of waste produced (or grouped together) at the same place is greater than 5 Kgs and lesser or equal to 15 kilograms per month, the waste should be stored in an indoor area that meets the following characteristics:
- Specific location for the grouping of such wastes.
- · Adequat solution to the quantity of waste.
- · Identified area (labelling on the door) and limited access (key locked).
- · Storage in permanently sealed containers.
- · Storage away from heat sources.
- · Storage area easily cleaned and whenever necessary.

COMPLIANCE

- Complies with articles R.1335-1 and R.1335-5 of the Public Health Code relating to DASRI.
- · Complies with the order of 14 October 2011 amending the orders of 7 September 1999 relating to storage methods and the control of disposal channels for DASRI and similar waste and anatomical
- Complies with recommendation for risk prevention and safety.
- Standardized warning labels according to NF X08.003, ISO 3864 and ISO 7010 standards, and with the European directive 92/58/ CFF

ADVANTAGES

- Cost-effective solution for the safe storage of hazardous waste in compliance with the legislation mentioned above.
- · Yellow color and Standardized «infectious risks» labelling.
- · Allows for example the storage of up to 9 boxes of hazardous waste of size H 575m x W 295 x D 295 in the AZ304 model.

PASSIVE SAFETY

- · One-piece steel construction.
- Epoxy paint: body grey RAL 7035; door(s) yellow RAL 1023.
- · Shelves/Containment sumps 50 mm high, adjustable in height on racks in 15 mm increments.
- · Load capacity per level, evenly distributed, maximum 80 kg.
- · Standardized «infectious risk» warning labels.

ACTIVE SAFETY

- Top and bottom ventilation holes in the doors.
- · Hinged door(s) with 110° opening angle.
- · 3 points key lock.

OPTIONS

- · Additional shelf (ref.: ESE150 and ESE300).
- · Galvanized perforated cover plate for shelves / Containment sumps (ref.: CE150 and CE300).
- Drilling for connection to a forced ventilation system. (ref. AZVENT), supplied with a Ø 100 mm sleeve (must be ordered with

		AZVENT), supp the cabinet).	neu with a b it	o mm sieeve	(must be ord	erea wit
P/N	Description	Dimensions H x W x D (mm)	Storage capa- city (L)	Containment capacity (L)	Number of shelves	Weight (kg)
AZ54	1 door counter cabinet	Ext.: 1000 x 500 x 500 Int.: 890 x 498 x 453	80	20	2	26
AZ114	2 door counter cabinet	Ext.: 1000 x 930 x 500 Int.: 890 x 925 x 453	155	40	2	43
AZ154	1 door tall cabinet	Ext.: 1950 x 500 x 500 Int.: 1840 x 498 x 453	150	40	4	55
AZ304	2 doors tall cabinet	Ext.: 1950 x 930 x 500 Int.: 1840 x 925 x 453	300	80	4	73
ESE150	Shelf / base through for AZ54 / AZ154	50 x 488 x 443	-	10	-	3
CE150	Perforated cover plate for ESE150	50 x 483 x 438	-	-	-	5
ESE300	Shelf / base through for AZ114 / AZ304	50 x 915 x 443	-	20	-	6
CE300	Perforated cover plate for ESE300	50 x 913 x 438	-	-	-	10
AZVENT	Opening vent	-	-	-	-	-





VENTILATION BOX



△ CDV-A + option KRC + option KL100 + option CDS100



▲ CDV-A



OPERATING PROCESS

The electric fan allows the extraction of toxic vapors that are created inside your hazardous goods storage cabinets.

COMPLIANCE

Electric fan complies with ISO 3744 and CE specifications.

ADVANTAGES

- Adaptable to any type of cabinet, simple and aesthetic assembly.
 Easy adaptation between the opening on the cabinet and the ventilation opening.
- Connection via flexible hose Ø 100 mm (optional).
- · On/off switch with indicator light to control the fan power supply.

TECHNICAL CHARACTERISTICS

- 12/10th steel construction, epoxy painted white RAL 9010.
- Steel volute electric fan with on/off switch.
- 220/240 volts 50 Hz -62 W 0.28 A 57 dB(A) (excluding airflow)
- Flow rate: 240 m3/h.
- Inlet diameter: Ø 100 mm / outlet diameter: Ø 100 mm.

OPTIONS CONNECTION KIT (KRC)

- · Allows easy connection of a box to a safety cabinet.
- 1 Ø 100 mm sleeve, ref. CHJ, to be fixed on the ventilation outlet of your cabinet.
- 1 metre of flexible hose Ø 100 mm, ref. KL100.
- 2 clamps of Ø 100 mm, ref. CDS100.

P/N	Description	Dimensions H x W x D (mm)	Weight (kg)
CDV-A	Steel ventilation box	235 x 260 x 245	8
KRC	Connection kit for box	-	1
1 KL100	Hose diam. 100 mm, per metre	-	0,2
CHJ	Steel connection sleeve diam. 100 mm	-	0,1
CDS100	Clamp diam. 100 mm	-	-

VENTILATION EQUIPMENTS



P/N	Description	Weight (kg)
2 R100	Duct connection diam. 100 mm	0,5
3 RT188	Cross in PVC diam. 100 mm	0,5
5 CT90	PVC 90° elbow diam. 100 mm	0,5
O V125	Manually operated PVC damper diam. 125 mm	1
7 BT188	PVC tee diam. 100 mm (also available in Y, please consult us)	0,5
3 ELE75	Reducer diam. 100/75 mm	0,5
1 ELE39	Reducer diam. 125/100 mm	0,5

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SAFETY EQUIPMENT FOR THE STORAGE AND RETENTION OF DANGEROUS PRODUCTS





Range G



Range BR



Range R



Range AA



Range J



Range S



EOUIPMENT FOR THE RETENTION OF DANGEROUS PRODUCTS

GENERAL

All chemicals must be stored above a containment spill.

The regulations differ according to the industrial or community sites, but also according to the nature of the products stored.

REGULATIONS

The volume of retention of any storage of dangerous liquids that could pollute water and soil must be at least equal to the biggest following values:

IN ITALY

- · 100% of the biggest container
- · 30% of the total volume stored

IN GERMANY AND SWITZERLAND

- 100% of the biggest container
- 10% of the total volume stored (except for agriculture 50% of the total volume)

SAFETY CABINETS FOR TOXIC PRODUCTS AND MULTI-HAZARD SAFETY CABINETS

GENERAL

For obvious safety reasons (risk of fire, explosion, poisoning, corrosion, etc.), hazardous liquids must be stored and handled in suitable safety containers.

The transport of hazardous materials is subject to special regulations. Only UN-approved containers guarantee an optimal level of safety for the transport of hazardous liquids.

Safety containers differ from security containers in that they are composed of safety elements:

Flame arresters: to prevent the spread of flames to the liquid in the container itself;

Pressure relief valve: prevents the container from exploding due to excessive pressure in the container.

Standardized warning labels: to indicate the type of product stored in the container and to avoid any risk of mixing incompatible products. Safety data sheets must also be available near workstations to enable emergency services to act effectively.

STANDARDISATION



UN (UNITED NATION):

Receptacles bearing the UN mark are approved for the transport of dangerous goods by road.



FM (FACTORY MUTUAL):

International insurance and accreditation body for safety equipment and advice to companies.



CNPP (CENTRE NATIONAL DE PRÉVENTION ET DE PROTECTION):

Reference body carrying out tests and controls of safety materials.











Fume hoods, filtering

cabinets

Flammable

Corrosive

Toxic cabinets and Multirisk

CONTAINMENT SUMPS







▲ E8A2

▲ B48

SBPVC





ADVANTAGES

- Can be placed on a bench or workbench.
- · Leaks and spills of liquids and powders are contained to the bottom of the container.
- Edges ensure that stored containers are held in place.
- · Quick product display.
- · Fast and safe storage of containers during routine handling.
- · Easy to clean.
- Leaks are quickly located.

OPTION

· Absorbent mat (ref: JF10D).

POLYPROPYLENE CONTAINMENT SUMP

(ref. E8A2) For corrosive products.

- High chemical resistance to corrosive products.
- 24/10th polypropylene construction.

STEEL SUMPS

(ref. E48, E35, B148 and B235) For toxic, noxious, pollutants...

- · Robust construction in 15/10th steel.
- · White epoxy paint RAL 9010.
- · Optional perforated cover plate to be positioned in the sump

PVC CONTAINMENT SUMPS

(ref. sepvc and sbpvc) For corrosive products.

- · High chemical resistance to corrosive products.
- · Made of 20/10th PVC.

		Dimensions	Storage	capacity		Weight
P/N	Description	H x W x D (mm)	Bottles 1 L	Bottles 2,5 L	Containment capacity (L)	(kg)
SEPVC	PVC Containment sump	20 x 525 x 455	19	10	5	2
SBPVC	PVC Containment sump	90 x 535 x 465	19	10	24	3
E8A2	Polypropylene Containment sump	85 x 455 x 480	18	9	11	5
E48	Steel Containment sump	30 x 490 x 410	16	9	6	3
E35	Steel Containment sump	30 x 992 x 410	36	20	12	6
B48	Steel Containment sump	100 x 480 x 410	16	9	20	5
C48	Perforated cover plate for B148 containment sump	90 x 460 x 395	-	-	A perforated plate inserted inside a base through reduces the volume of containment by 3 liters.	4
B35	Steel Containment sump	100 x 985 x 410	36	20	41	10
C235	Perforated cover plate for B235 containment sump	90 x 975 x 395	-	-	A perforated plate inserted inside a base through reduces the volume of containment by 6 liters.	8

Containment and cans

Anti-fire equipments File cabinets

Showers and firstaid equipments











PALLETS & ACCUMULATION CENTRES FOR SPILL CONTAINMENT







28254



▲ AK28906









Removable perforated cover plate



Joining clips for accumulation center (ref. 28926)

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COMPLIANCE

- · Complies to article 10 of 2 February 1998 concerning the storage of liquids likely to cause water or soil pollution.
- · Complies to EPA, SPCC, UL Environment, NFPA1 and OSHA specifications (depending on model).

TECHNICAL SPECIFICATIONS

- 100% recycled polyethylene construction.
- · Removable perforated cover plate made of 100% recycled polyethylene.
- Storage of 2 to 8 drums of 60, 100 or 200 litres.
- Forks for empty handling by pallet truck (only on models 28234 and 28254).

OPTIONS

- · Access ramp for accumulation centres 28923 and AK28905 (Ref.: AK28906).
- · Clips to join 2 accumulation centres 28923 and AK28905 (Ref.: 28926).
- · Absorbent mat (Ref.: JF10D).

ADVANTAGES

- · High resistance to chemicals.
- · Easy to clean with water.

P/N	Description	Dimensions H x W x D (mm)	Load capacity (kg)	Containment capacity (L)	Compliance ⁽¹⁾	Weight (kg)
28234	2 drums containment pallet (inline)	457 x 1245 x 635	1134	250	EPA, SPCC, U, O, UL	20
28703	3 drums containment pallet (inline)	295 x 1854 x 635	1701	284	EPA, SPCC, U, O, UL	26
28704	4 drums containment pallet (inline)	229 x 2464 x 635	2268	284	EPA, SPCC, U, O, UL	35
28254	4 drums containment pallet (in square)	260 x 1245 x 1245	2268	276	EPA, SPCC, U, O, UL	32
28923	4 drums accumulation center (in square)	140 x 1245 x 1245	2268	185	-	28
AK28905	8 drums accumulation center (in square)	140 x 2464 x 1245	4536	371	EPA, SPCC, U, O, UL	55
AK28906	Ramp for the centers	159 x 1219 x 838	455	-	-	19
28926	Joint clip set	-	-	-	-	0,1









Fume hoods, filtering

SPILL TRAYS/ COVERED POLYETHYLENE OUTDOOR SPILL PALLETS









▲ BRC30

▲ BR250 ▲ BR1000

ADVANTAGES

- High chemical resistance.
- Easy to clean.

CONTAINMENT SUMPS

- Made of black polyethylene.
- Removable perforated cover plate with yellow non-slip surface.

RETENTION PALLET FOR 1000 L TANK

- Made of 100% recyclable polyethylene, yellow in color.
- Removable black perforated cover plate.
- Forklifts for easy movement (empty).

COVERED POLYETHYLENE OUTDOOR SPILL PALLET FOR 2 X 200 L DRUMS

- $\bullet \ \mathsf{Made} \ \mathsf{of} \ \mathsf{yellow} \ \mathsf{polyethylene}.$
- Sliding door in black polyethylene.
- Removable black perforated cover plate.
- Supplied in kit form with stainless steel connecting elements.
- Forklifts for easy movement (empty).
- Can be locked with a U-shaped padlock (U with a height of 80 mm recommended).

Containment capacity (L) Dimensions H x W x D (mm) **Description** Load capacity (kg) BR20 Containment sump - 20 L - without perforated cover plate 2 155 x 600 x 400 50 20 BRC20 Containment sump - 20 L - with perforated cover plate 3 **BR30** Containment sump - 30 L - without perforated cover plate 3 50 30 155 x 805 x 405 BRC30 Containment sump - 30 L - with perforated cover plate 4,5 **BR40** Containment sump - 40 L - without perforated cover plate 3,5 155 x 800 x 600 100 40 BRC40 Containment sump - 40 L - with perforated cover plate 6,5 5 BR60 Containment sump - 60 L - without perforated cover plate 175 x 1000 x 600 200 60 BRC60 Containment sump - 60 L - with perforated cover plate 9 BR100 Containment sump - 100 L - without perforated cover plate 7 175 x 1200 x 800 200 100 BRC100 Containment sump - 100 L - with perforated cover plate 14,5 Covered polyethylene containment BR250 250 101 2110 x 1565 x 995 650 pallet for 2 x200 liters drums BR1000 Spill pallet for 1000L IBC 2000 1100 105 1000 x 1450 x 1450

Containment and cans

Anti-fire equipments

File cabinets

Corrosive

Toxic cabinets and Multirisk

Showers and first-

equipments

aid



SAFETY SHELVING







COMPLIANCE

Complies to article 10 of 2 February 1998 concerning the storage of liquids likely to cause water or soil pollution.

ADVANTAGES

- \bullet For the storage of corrosive, toxic, harmful or polluting products.
- Allows products to be stored by category, by affinity or by family.
- Any leaks are quickly located at their level.
- Containment sumps with edges to ensure that stored containers are held securely.
- · Quick visualization of the products.

OPTIONS

- · Absorbent mat (ref: JF10D).
- · Additional shelf for steel models

HDPE POLYETHYLENE SHELVING

For corrosive products

- High chemical resistance to corrosive products.
- 5 storage levels.
- · Load capacity per level: 60 kg evenly distributed.
- · Support made of high density polyethylene (HDPE).
- Warning labels according to ISO 3864 and NF X08.003 standards, and with European Directive 92/58/EEC.
- Removable PVC Containment sumps:
- · Height 30 mm,
- Easy extraction for cleaning.

STEEL SHELVING

For toxic, noxious, polluting products...

- 4 or 5 levels of storage adjustable in height (in 6.25 cm increments).
- Load capacity per level: 250 kg evenly distributed.
- Sturdy steel construction, epoxy painted yellow RAL 1004.
- Removable steel containment sumps:
- Powder coated grey RAL 7035,
- · Height 50 mm.
- 2 depths to choose from: 390 or 590 mm

P/N	Description	Dimensions H x W x D (mm)	Storage (L)	Containment capacity (L)	Number of levels	Weight (kg)
RRP2	Polyethylene shelving	1820 x 900 x 450	120	60	5	35
RRA41	Steel shelving	2000 x 980 x 390	180	90	5	50
RRA414	Steel shelving, starting element 390 mm deep	2000 x 980 x 390	144	72	4	45
RRA414ES	Next element depth 390 mm	2000 x 960 x 390	144	72	4	43
RRA60	Steel shelving	2000 x 1030 x 590	270	135	5	75
RRA604	Steel shelving, starting element 590 mm deep	2000 x 1030 x 590	216	108	4	65
RRA604ES	Next element depth 590 mm	2000 x 1000 x 590	216	108	4	63
BAC410	Additional shelf for RRA41, RRA414 and RRA414ES	50 x 940 x 390	36	18	-	10
BAC600	Additional shelf for RRA60, RRA604, RRA604ES	50 x 940 x 590	54	27	-	13
JF10D	Option Set of 10 absorbent sheets	-	-	-	-	1



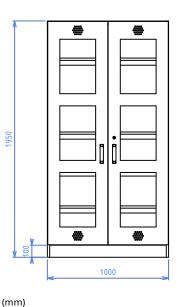


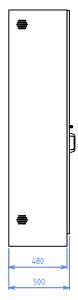
Fume hoods, filtering

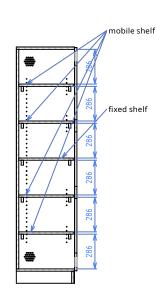
cabinets

NON-MAGNETIC SAFETY CABINET TALL, 2 GLASS HINGED DOORS











▲ AA220V

CONCEPTION

Specially designed for the storage of equipment sensitive to external magnetic fields

DESCRIPTION

- · Cabinet construction in cellular PVC and austenitic stainless steel.
- · Colour of doors: white RAL 9010.
- · Number of doors: 2.
- 5 shelves, 4 of which are removable and 1 fixed.
- · Hinged doors on plastic hinges with austenitic stainless steel axle, manual closing.
- Glass or PMMA front (3 per door, not partially UV filtering).
- Type of lock: 1 austenitic stainless steel 1-point swing lock
- Plated fields: ABS 8/10 mm white.

ADVANTAGES

- · Made in Europe.
- · Adjustable plastic feet for levelling.
- · Fixed and removable shelf in cellular PVC on brackets with reinforcements.
- Construction in cellular PVC and stainless steel: magnetically neutral.
- · Honeycomb ventilation holes.

OPTION

· Wall fixing kit.

Réf.	Designation	Ext.dim. H x W x D (mm)	Removable shelves	Fixed shelf	Load capacity per shelf (kg)	Weight (kg)
AA220V	Non-magnetic cabinet with glass front (does not filter UV light)	2015 x 1200 x 800	4	1	40	150
AA220P	Non-magnetic cabinet PMMA front (partially UV filtering)	2015 x 1200 x 800	4	1	40	151

Flammable











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SAFETY CANS



▲ 10811 + 11202Y



Dual density flame arrester



Ergonomic grip for transportation

COMPLIANCE

- · All cans are FM, NFPA, OSHA and UL approved.
- Type I cans are ULC and TÜV approved.
- Type UNO cans are UN and DOT approved for the transport of flammable liquids.
- · Standardized labelling according to ISO 3864 and NF.X 08.003, and with the 92/58/EEC directive.

TECHNICAL CHARACTERISTICS

- Galvanized steel construction.
- Ergonomic and resistant handle.
- Dual density flame arrester.
- · Automatic closing of the cap with spring return.
- · Spring loaded as a pressure relief valve.
- Reinforced body and raised bottom are impact resistant.
- · Solvent resistant electrostatic powder coating.

TYPE I SAFETY CONTAINERS







10811

P/N	Storage	Dimensions H x Ø (mm)	Weight (kg)	Compliance
10111	0,9	210 x 117	0,8	FM, UL, ULC, TÜV
10311	3,8	279 x 241	1,8	FM, UL, ULC, TÜV
10511	7,5	349 x 241	2,5	FM, UL, ULC, TÜV
10611	9,5	292 x 298	3	FM, UL, ULC, TÜV
10811	19	429 x 298	3,5	FM, UL, ULC, TÜV

LABORATORY-TYPE SAFETY CONTAINERS



<u></u> 10808

P/N	Storage	Dimensions H x Ø (mm)	Weight (kg)	Compliance
10608	9.5	292 x 298	4	FM
10808	19	403 x 298	4,5	FM











Fume hoods, filtering

cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive

TYPE I SECURITY CONTAINERS IN HDPE



12161

- High density polyethylene (HDPE) construction.
- Stainless steel locking system with teflon seal.
 Spring handle opening with lock (model 12762 and 12765).

P/N	Storage	Dimensions H x Ø (mm)	Weight (kg)	Compliance
12161	3,8	324 x 194 x 117	1	FM
12762	7,6	375 x 305	2,5	FM

WETTING CONTAINERS



- To moisten without risk of rags or swabs.
- Spring-loaded pump system allowing liquids to raise up towards the dasher with flame arrester.

P/N	Storage	Materials	Dimensions H x Ø (mm)	Weight (kg)	Compliance
10118	1	Galvanized steel	165 x 184 x 184	1,3	FM - TÜV
10218	2	Galvanized steel	203 x 184	1,5	FM - TÜV
10318	4	Galvanized steel	279 x 184	2	FM - TÜV

10118

TAPS FOR CONTAINERS



▲ 08540

P/N	Description	Compliance
08540	Brass safety valve with 3/4" thread for laboratory canisters	FM
08902	Brass safety valve with strainer flame arrestor - ¾" NPT thread	FM

Toxic cabinets and Multirisk









SAFETY CANS FOR FLAMMABLES



COMPLIANCE

· UN approval (depending on model).

ADVANTAGES

- Safe protection when handling flammable liquids and other hazardous materials in the laboratory and industry.
- · Quality containers with a long service life.
- For safe filling and dosing of small quantities of flammable liquids in the workplace.
- Resistant to chemicals thanks to the use of high-quality stainless steels and PTFE seals.
- Special containers for the safe transport of hazardous substances compatible with all means of transport (depending on model).

TECHNICAL FEATURES

- Explosion protection: flame arresters, safety valves.
- Dosing spout for precise dosing.
- · Automatic closure.
- · Made of stainless steel.
- PTFE (Polytetrafluorethylene) Teflon seals.
- · Stainless steel handle.

CONTAINERS FOR TRANSPORT

- Equipped with a flame arrestor and a threaded cap, without pressure control valve.
- · UN accreditation number on every container.

SAFETY CANS FROM 1 TO 5 LITRES



P/N	Remplissage et vidange Cap. Dimensions (L) H x Ø (mm)			Weight (kg)	
S01BV	With polished precision spout	1	238	111	0,7
S02BV	With polished precision spout	2	296	131	0,8
S05BV	With polished precision spout	5	401	165	1,2
S01BT	With certification UN 1A1/X2.0/400//D/BAM8603-D/R, with screw cap	1	235	111	0,7
S02BT	With certification UN 1A1/X2.0/400//D/BAM8604-D/R, with screw cap	2	275	131	0,8
S05BT	With certification UN 1A1/X2.0/400//D/BAM8605-D/R, with screw cap	5	400	165	1,2







SAFETY CANISTERS FROM 5 TO 20 LITERS





S10JT S10JV S05JT S20JTS



• Canister's rectangular shape maximises the storage space in safety cabinets.

- Capacity of 5, 10 and 20 litres. Polished finish.
- Canister with self-closing taps for horizontal storage and decanting.
 with separate compensation valve (ref. S20JV)
- Stainless steel handle.
- Thread: 1/2 ".

P/N	Filling and draining		Dimensions H x W x D (mm)	Weight (kg)
S05JV	, ,		310 x 200 x 130	1,6
S10JV			380 x 280 x 130	2,5
S20JVS	With precision spout and separate ventilation	20	470 x 345 x 175	3,7
S05JT	With certification UN 3A1/X1.6/300//D/BAM9930-D/R, with screw cap	5	310 x 200 x 130	1,7
S10JT	With certification UN 3A1/X1.6/300//D/BAM9931-D/R, with screw cap	10	380 x 280 x 130	2,5
S20JTS	With certification UN 3A1/X2.0/300//D/BAM5377-D/R, with screw cap and separate ventilation	20	470 x 345 x 175	3,7

SAFETY CANISTERS FROM 10 TO 50 LITERS





S50FVSJ

S10FVSJ





S10FVS



S10FT

• For secure storage of large quantities

- 25l and 50l models can be stacked.
- PTFE seals
- Level gauges in PFA (Perfluoroalkoxy)
- · Self-closing taps

P/N	Filling and draining	Cap. (L)	Dimensions H x Ø (mm)		Weight (kg)
S10FVS	With precision spout 3/4" and separate ventilation	10	330	260	2,5
S25FVS	With precision spout 3/4" and separate ventilation	25	540	315	6,5
S50FVS	With precision spout 3/4" and separate ventilation	50	600	365	12,2
S10FVSJ	With precision spout, separate ventilation and content level indicator	10	330	260	2,8
S25FVSJ	With precision spout, separate ventilation and content level indicator	25	540	315	7,5
S50FVSJ	With precision spout, separate ventilation and content level indicator	50	600	365	12,9
S10FF	With screw cap 1½"	10	330	260	2,2
S25FF	With screw cap 11/2"	25	540	315	6,4
S50FF	With screw cap 1½"	50	600	365	12,1
S10FT	With screw cap 1½" and certification UN13A1/X2/400//D/BAM12888-D/R	10	330	260	2,3
S25FT	With screw cap 1½" and certification UN13A1/X1.6/400//D/BAM9985-D/R	25	530	300	6,4

SAFETY CANISTERS FROM 1 TO 5 LITERS



- Spring-loaded pump system allows the liquid to rise to the dip cup, which also acts as a flame arrestor.
- Dip cup for safe soaking of rags, paper, etc.

P/N	Description	Cap. (L)	Dimensions H x Ø (mm)		Weight (kg)
S01BH	Moistener with soaking tray and pump 1¼"	1	270	120	0,9
S02BH	Moistener with soaking tray and pump 1¼"	2	330	131	1
S05BH	Moistener with soaking tray and pump 11/4"	5	267	260	2

Fume hoods, filtering cabinets - Ventilation

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SAFETY BOTTLES





ADVANTAGES

- · No leakage when the bottle tips over.
- Lid can only be opened by finger pressure.
- · Automatic closing.
- · Precise dosing.
- · Double opening and tight closing by spring and O-ring.
- · Stopper with its «nitrile-rubber» seal.

TECHNICAL CHARACTERISTICS

- · Aluminium body: Al 99,5.
- · Threaded ring: Al Mg Si Pb.
- · Plastic valve: PPN.
- · Nitrile-rubber sealing ring.
- O-rings:
- · Either VITON (red cap),
- · Or EPDM (yellow cap).
- · Spring: X5 Cr Ni Mo 4401.

P/N	O-rings	Capacity (L)	Dimensions H x Ø (mm)	Weight (kg)
1619R	VITON (red)	0,4	222 x 65	0,122
1633R	viion (rea)	1	280 x 80	0,183
1619J	FDDM (vollow)	0,4	222 x 65	0,122
1633J	EPDM (yellow)	1	280 x 80	0,183

RANGE K





51061B









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DUAL-PURPOSE CONTAINER

COMPLIANCE

UN approved.

ADVANTAGES

- · Very robust construction.
- · Integrated grip handle.

TECHNICAL FEATURES

- Double wall construction:
- · Metal outer wall coated with blue epoxy paint (RAL 5010) for better protection against impact and fire.
- · Watertight inner wall made of polyethylene and resistant to chemical attack.
- · Polyethylene closing cap with 2» threaded joint.
- · Capacity: 12 litres.

OPTION

All stainless steel funnel (2" thread) with a flame arrester grid.

P/N	Description	Dimensions H x Ø (mm)	Weight (kg)
51061B	Can RAL 5010 UN n°6HA1/X/300//D/BAN3039-GDH	345 x 240	1,8
51000	Stainless steel funnel	125 x 140 ⁽¹⁾	0,7







FIRE PROTECTION EQUIPMENTS & **FILE CABINETS**





Range P



Range C



Range AD4



Range AD3



Range AD30



Range AD79+







SAFETY CABINETS FOR DOCUMENTS

GENERAL

Safety cabinets for documents are used to store all your paper documents and protect them from damage. They are equipped with a thermal insulator which delays the penetration of fire into the safe.

STANDARDIZATION



NT FIRE 017: Swedish standard that is the reference on the market for document and data storage cabinets. There are 3 types: 30, 60 and 90 minutes.



EUROPEAN STANDARD NF EN ISO 1182:

This standard is a test standard for the non-combustibility of construction products (thermal insulation).



FM (FACTORY MUTUAL)

This regulation offers worldwide industrial and commercial product certification and testing services through its business unit FM Approvals. Worldwide recognized and respected, FM Approvals certification insures customers that a product or service has been objectively tested and conforms to the highest national and international standards.

FIRE RESISTANT SAFETY CABINETS FOR DOCUMENTS

GENERAL

To protect people and property, it is necessary to equip your premises with fireproof materials.

Ashtrays and safety bins will make it possible to contain the start of a fire by confining and smothering it within the ashtray or bin itself, as soon as it starts.

The fire blankets will make it possible to smother the start of a fire, both on a person or on an object, but they can also be used as a heat shield in the event of a serious fire.

STANDARDIZATION



EN EUROPEAN STANDARD 1869-1997:

This standard stipulates that the blanket must be able to withstand heat of approximately 900°C caused by flaming soybean or rapeseed oil. The electrical resistance of the cover must not be less than 1 Ohm.



FM (FACTORY MUTUAL):

International insurance and accrediting body for safety equipment and advice to companies.



Fume hoods, filtering

Flammable

Corrosive

Toxic cabinets and Multirisk



COMPLIANCE

• Compliant to CNPP FSE 8414-D, TNO and IBBC approved No. B 89.623 ANPI and NVBB No. NT 108.

BENEFITS

- In the event of a fire inside the bin, the funnel-shaped smothering lid prevents hot gases from escaping and sends them back to the fire, which, deprived of oxygen, extinguishes itself.
- · Many models available (in capacity and in colors).

TECHNICAL CHARACTERISTICS

- 8/10th steel construction.
- · Anti-cut edges on the upper part and anti-scratch on the lower
- Funnel-shaped safety lid making the whole unit self-extinguishing.
- Epoxy paint: pearl grey lid and body; black lid and red body; black lid and metal grey body.
- · Capacity: 15, 30, 50, 80 and 110 litres.

P/N	Color	Dimensions H x Ø (mm)	Capacity (L)	Weight (kg)
18GP	Pearl grey body and lid	360 x 255	15	1,7
18RN	Red body - Black cover	360 x 255	15	1,7
18MN	Metal grey body - Black lid	360 x 255	15	1,7
30GP	Pearl grey body and lid	470 x 335	30	3,9
30RN	Red body - Black lid	470 x 335	30	3,9
30MN	Metal grey body - Black lid	470 x 335	30	3,9
50GP	Pearl grey body and lid	625 x 335	50	4,6
50RN	Red body - Black lid	625 x 335	50	4,6
50MN	Metal grey body - Black lid	625 x 335	50	4,6
80GP	Pearl grey body and lid	510 x 450	80	8
80RN	Red body - Black lid	510 x 450	80	8
80MN	Metal grey body - Black lid	510 x 450	80	8
110GP	Pearl grey body and lid	710 x 450	110	9,3
110RN	Red body - Black lid	710 x 450	110	9,3
110MN	Metal grey body - Black lid	710 x 450	110	9,3

Containment

and cans

Anti-fire equipments File cabinets

Showers and first aid equipments









FOOT OPERATED OIL WASTE BINS





COMPLIANCE

- Complies to FM (Factory Mutual), UL (Under- writers Laboratories) and TÜV specifications.
- Standardized labelling according to ISO 3864 and NF X08.003, and European Directive 92/58/EEC.

ADVANTAGES

- Easy opening by foot pedal.
- · Natural ventilation allowing the evacuation of vapors.

TECHNICAL CHARACTERISTICS

- · Steel construction.
- Yellow or red epoxy paint.
- · Foot pedal opening with automatic closing.
- · Natural ventilation at the base of the bin.

P/N		Dimensions	Capacity	Compliance	Weight
Yellow	□ □ v Ø (mm) (1)		(L)	Compliance	
09101	09100	403 x 302	20	FM - UL - TÜV	6
09301	09300	464 x 354	34	FM - UL - TÜV	7
09501	09500	514 x 408	52	FM - UL - TÜV	8
09701	09700	595 x 467	80	FM - UL - TÜV	12

RANGE A





FIRE BLANKETS





▲ 180120RRP

▲ 120120RRP

OPERATING PRINCIPLE

• The fire blankets are mounted on the wall and are equipped with two instantaneous opening tapes. In the event of a fire, simply pull them to deploy the blanket. They can be used to smother fires as soon as they start by acting as a heat shield, depriving the fire of its oxygen supply. They can protect both people and property.

COMPLIANCE

· Complies with the European standard EN 1869-1997.

ADVANTAGES

- Wall-mounted thanks to the box, allowing immediate viewing and quick access.
- Extra-flat, very light and very resistant.
- Instant opening by means of two tapes.

TECHNICAL CHARACTERISTICS

- Made of fibreglass (420gr/m²), extra flat texture.
- · Non-combustible, resistant to over 900°C.
- Instructions for use on the boxes.

P/N	Model	Case dimensions H x W x D (mm)	Dimensions of the cover (mm)	Compliance	Weight (kg)
180120RRP	Flat rectangular red wall box	360 x 160 x 35	1800 x 1200	EN	1
120120RRP	Flat rectangular red wall box	285 x 160 x 35	1200 x 1200	EN	1





"SMOKERS" FIREPROOF ASHTRAYS



▲ 26800-N

▲ 26800-B

▲ 26800-T

▲ 26800-G

▲ 26800-V





COMPLIANCE

• FM (Factory Mutual) and ADA compliant.

BENEFITS

- Specially designed to reduce the risk of fire.Low maintenance required on the outer shell, no risk of corrosion.
- Very high impact resistance.

- **TECHNICAL CHARACTERISTICS** Fire retardant high density polyethylene (HDPE) construction.
 17.6 L galvanized steel collection bucket.
- Head with 38 mm side opening to prevent rain penetration.
- · Space for crushing cigarette butts.
- · Large head for heat dissipation.
- · Moulded fasteners for floor fixing.

P/N	Color	Dimensions H x Ø (mm)	Compliance	Weight (kg)
26800-N	Back	1050 x 420	FM - ADA	7
26800-G	Grey	1050 x 420	FM - ADA	7
26800-T	Terra cotta	1050 x 420	FM - ADA	7
26800-В	Beige	1050 x 420	FM - ADA	7
26800-V	Green	1050 x 420	FM - ADA	7



SECURE CABINETS WITH INDIVIDUAL LOCKERS FOR MOBILE PHONES



GENERAL

In secondary (or high school) schools, the internal regulations may prohibit the use by a student of the above mentioned devices in all or part of the school premises as well as during activities taking place outside the school. These cabinets are specially designed for the storage of smartphones in individual lockers. We offer cabinets with 20 or 35 lockers, each with a set of two keys and a separate lock.

ADVANTAGES

- · Can be fixed to the wall.
- · Individual lock with key.
- Individual label holder per locker.
- · Pass key available on request (optional).
- · Reinforced individual doors with sound absorber on closing.

TECHNICAL FEATURES

- Cabinet construction: robust steel and grey epoxy paint RAL 7035.
- Color of doors: Blue RAL 5015.
- Type of doors: Hinged.
- · Hinges: Right.
- · Closing of the doors: Manual.
- Locker dimensions (identical for all models): Width: 193 mm -Depth: 121 mm - Height: 210 mm.

P/N	Number of lockers	Dimensions H x W x D (mm)	Weight (kg)
ASC20	20 lockers (4 x 5)	1100 x 800 x 150	27
ASC35	35 lockers (7 x 5)	1100 x 1380 x 150	43



DOCUMENT SAFES







▲ AD2004

COMPLIANCE

• Insulating boards between walls classified as A1 and non-flammable according to EN ISO 1182.

ADVANTAGE

- Thermally insulated cabinet with fire retardant properties.
- Burglar-proof cabinet with 2 points locking system and double hinged doors.
- Large storage capacity.

ACTIVE SECURITY

- · Double hinged doors.
- Key lock and 2 points locking.
- · Chrome-plated door handle.

PASSIVE SAFETY

- Double wall construction in 12/10th grade steel.
- Thermal insulation panels between the walls, thickness 20 mm.
- White epoxy paint RAL 9010.
- Solid, height-adjustable shelves with a load capacity of 75 kg evenly distributed per shelf, painted with white epoxy paint RAL 9010.

OPTIONS

- · Additional shelf.
- · Hanging file shelf.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Number of shelves	Weight (kg)
AD1204	Counter cabinet for documents	1295 x 1000 x 450	1145 x 950 x 400	2	92
AD2004	Tall cabinet for documents	2095 x 1000 x 450	1945 x 950 x 400	4	145
ESAD4	Additional shelf for AD1204 and AD2004				5
ADOS4	Suspension file shelf for AD1204 and AD2004				6

ISO 1182





SAFE FOR DOCUMENTS







shelf for suspended files (optional)



▲ AD130



▲ AD300

COMPLIANCE

Non-flammable insulating boards between the walls, classified A1 according to NF EN ISO 1182.

ADVANTAGE

- Cabinet with thermal insulation on all sides for fire resistance.
- Cabinet with burglary resistance, 5 points door locking.
- Low cabinet weight for easy installation when floor load is limited.

PASSIVE SECURITY

- Double-walled, 9/10 steel construction.
- Thermal insulation panels between the walls, thickness 25 mm.
- Epoxy paint: Light grey RAL 7035 for the doors; Anthracite grey RAL 7021 for the frame.
- Solid, height-adjustable shelves with a load capacity of 70 kg evenly distributed per shelf, epoxy-painted light grey RAL 7035.

ACTIVE SAFETY

- · Double hinged doors.
- Key lock and 5 points pin lock with double pennant security lock.
- Black door handle.

OPTIONS

- · Additional shelf.
- · Hanging file systems.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Number of shelves	Weight (kg)
AD130	Counter cabinet for documents	1226 x 930 x 500	1060 x 878 x 429	2	85
AD300	Tall cabinet for documents	1950 x 930 x 500	1810 x 878 x 429	4	120

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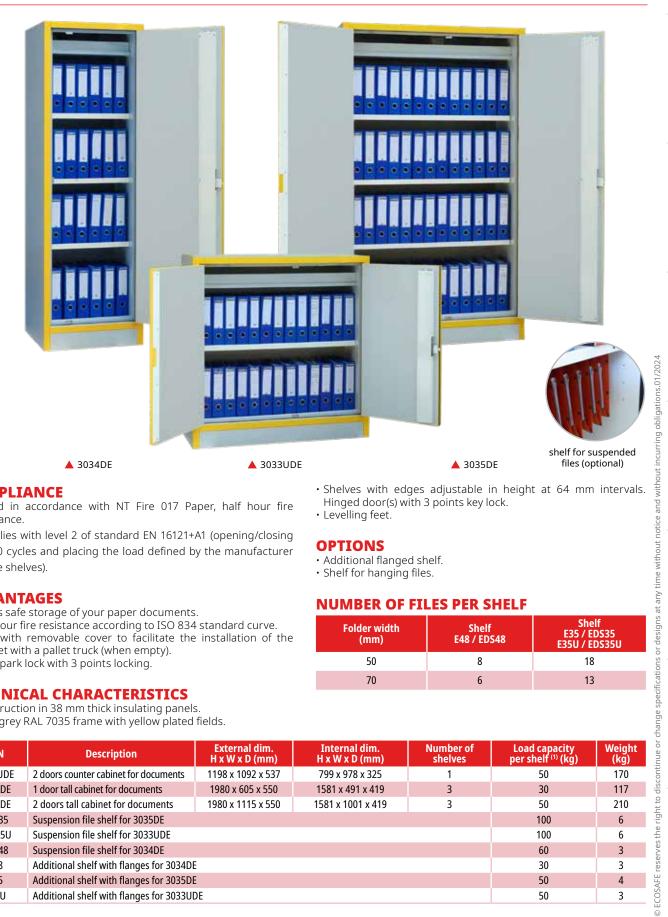
Fume hoods, filtering

Flammable

Corrosive

and Multirisk

FIREPROOF CABINETS FOR THE PROTECTION **OF PAPER DOCUMENTS - 30 MIN**



COMPLIANCE

- Tested in accordance with NT Fire 017 Paper, half hour fire
- · Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).

ADVANTAGES

- · Allows safe storage of your paper documents.
- Half hour fire resistance according to ISO 834 standard curve.
- · Base with removable cover to facilitate the installation of the cabinet with a pallet truck (when empty).
- · Anti-spark lock with 3 points locking.

- · Shelves with edges adjustable in height at 64 mm intervals. Hinged door(s) with 3 points key lock.
- · Levelling feet.

OPTIONS

- · Additional flanged shelf.
- · Shelf for hanging files.

NUMBER OF FILES PER SHELF

Folder width (mm)	Shelf E48 / EDS48	Shelf E35 / EDS35 E35U / EDS35U
50	8	18
70	6	13

TECHNICAL CHARACTERISTICS

- · Construction in 38 mm thick insulating panels.
- Light grey RAL 7035 frame with yellow plated fields.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Number of shelves	Load capacity per shelf ⁽¹⁾ (kg)	Weight (kg)
3033UDE	2 doors counter cabinet for documents	1198 x 1092 x 537	799 x 978 x 325	1	50	170
3034DE	1 door tall cabinet for documents	1980 x 605 x 550	1581 x 491 x 419	3	30	117
3035DE	2 doors tall cabinet for documents	1980 x 1115 x 550	1581 x 1001 x 419	3	50	210
EDS35	Suspension file shelf for 3035DE				100	6
EDS35U	Suspension file shelf for 3033UDE				100	6
EDS48	Suspension file shelf for 3034DE				60	3
E48	Additional shelf with flanges for 3034DE				30	3
E35	Additional shelf with flanges for 3035DE				50	4
E35U	Additional shelf with flanges for 3033UE		50	3		











1 HOUR 30 FIRE RESISTANT SAFE FOR DOCUMENTS



shelf for suspended files (optional)





- Tested and approved to NT Fire 017-90 Paper, 1.5 hours fire resistance.
- Complies with level 2 of standard EN 16121+A1 (opening/closing 80000 cycles and placing the load defined by the manufacturer on the shelves).

ADVANTAGE

- · Allows safe storage of your paper documents.
- Fire resistance of 1 hour 30 minutes according to the ISO 834 standard curve.
- · Full-height handle for easy opening and better ergonomics.
- Legs for easy movement by pallet truck: avoids heavy handling and allows the cabinet to be moved easily in the event of a new lavout
- Aesthetic and easy to use skirting board cover without the need for fixing tools.

TECHNICAL CHARACTERISTICS

- Double wall construction:
- External walls in 12/10th thick steel with white epoxy paint RAL 9010.



- Internal walls in melamine, color white RAL 9010.
- 50 mm thick thermal insulation panels between the walls to limit thermal bridges.
- Shelves with edges adjustable in height at 64 mm intervals.
- · Hinged door(s) with key lock.

OPTIONS

- Additional shelf.
- Shelf for hanging files.
- Colored doors are available for 794+DE and 795+DE: white frame and shelf RAL 9010; yellow door(s) RAL 1023.
- · Numeric code lock.

NUMBER OF FILES PER SHELF

Folder width (mm)	Shelf E48 / EDS48	ShelfE35 / EDS35
50	8	18
70	6	13

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F	P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Number of shelves	Maximum load by shelf (kg)	Weight (kg)
79	8+DE	1 door counter cabinet for documents	1100 x 635 x 620	820 x 490 x 410	2	30	191
79	3+DE	2 doors counter cabinet for documents	1100 x 1137 x 620	820 x 1000 x 410	2	50	332
79	4+DE	1 door tall cabinet for documents	1900 x 635 x 620	1620 x 490 x 410	3	30	319
79	5+DE	2 doors tall cabinet for documents	1900 x 1137 x 620	1620 x 1000 x 410	3	50	448
E	DS48	Suspension file shelf for 798+DE and 764+D	E			60	3
E	DS35	Suspension file shelf for 793+DE and 765+D	E			100	6
ı	E48	Additional shelf for 798+DE and 764+DE				30	3
I	E35	Additional shelf for 793+DE and 765+DE				50	4
SER	RCODE	Code lock equipped with its security key					1

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SAFETY SHOWERS, EYE-WASHERS AND FIRST-AID EQUIPMENTS





Range DL



Range DL



Range DL



Range DL





Range 19







SAFETY SHOWERS AND EYEWASH STATIONS AND FIRST AID EQUIPMENT

MAIN INFORMATIONS

For the safety of people, safety showers and eyewash stations are essential in premises where there is a risk of splashing dangerous products. They are therefore recommended in the:

- · Chemical and pharmaceutical industry,
- Food and automotive industry,
- · Chemical, petrochemical and biochemical laboratories,
- · Municipal workshops, garages and printing workshops,
- · Universities, high schools and colleges,
- · Hospitals and clinics,
- · Water treatment plants and swimming pools...

As first aid equipment, showers and eyewash stations should be installed close to danger areas. They should be easily accessible and clearly

REGULATIONS



ISO 3864:

This standard concerns the signage of equipment. It is taken up at European level by directive 92/58/EEC and at national level by standard NF X08.003. All our first aid equipment is supplied with warning labels that comply with these standards.

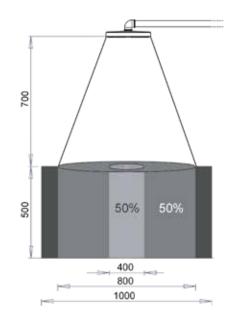
FRENCH STANDARD NF X 15-221:
This standard applies to This standard applies to body showers connected to the water network and used on industrial sites and places other than laboratories. The requirements of this standard are based on those of the European standard EN 15154-1 (see below).



EUROPEAN STANDARD EN 15154-1:

15154-1 This standard applies to body showers connected to the water system in laboratories. The main requirements of this standard are

- The zone of effectiveness of the water delivery, at a distance of 700mm below the shower head, shall follow the following pattern: 95% of the water delivered shall be within a circle of 800mm diameter; 50% (± 10%) the water shall fall within a radius of 400mm diameter.
- The water flow rate should be constant and a minimum of 60 L/min.
- The shower must be capable of supplying water for a minimum of 15 minutes.
- The water velocity should be low enough to avoid injury to the user.
- \cdot The height under the shower head should be 2200 \pm 100 mm from floor level.
- The water supply opening valve shall not close automatically.
- · The manufacturer shall supply the equipment with installation, operating and maintenance instructions.
- The shower shall be supplied with a Standardized label (see below).



AREAS COVERED BY THE STANDARDS NF X 15-221 and EN 15154-1:







EUROPEAN STANDARD EN 15154-2:

This standard applies to eyewash stations connected to the water system. The main requirements of this standard are:

- The water flow rate must be constant and at least 6 l/min,
- The eye washer must be able to supply water for a minimum of 15 minutes,
- The velocity of the water must be sufficiently low so as not to injure the user,
- The height of the water coming out of the nozzles should be between 100 and 300mm,
- The sprinklers must be at a distance of 1000 (± 200 mm) from the ground level,
- The water supply opening valve shall not close automatically,
- The manufacturer shall supply the equipment with installation, operation and maintenance instructions,
- The eyewash station shall be supplied with a Standardized label (see below).

Water temperature:

For comfort, and in order not to aggravate the injured person's injuries, the EN 15154-1 and EN 15154-2 standards recommend the use of water between 15°C and 37°C, the NF X 15-221 standard, between 15°C and 25°C. We therefore advise you to install a thermostatic mixer tap (optional, see below)

CHOOSE THE RIGHT SOLUTION FOR THE RISKS INVOLVED

Risks		First aid solution to be implemented	Norms
Drainction at hady laval	Stationary	Safety shower on water network	EN 15154-1 NF X 15-221
Projection at body level	Itinerant	Self-contained portable shower	R.4224-14
Projection at face and eyes level.	Stationary	Safety eye wash station on water system	EN 15154-2
ievei.	Itinerant	Stand-alone eye wash station	R.4224-14
Projection on the body, face and eyes	Stationary	Safety shower and eyewash station, or combined shower and eyewash station	EN 15154-1 NF X 15-221 EN 15154-2
una cycs	Itinerant	Self-contained portable shower and eye wash station	R.4224-14

INSTALLATION

It is recommended that first aid equipment be installed close to the danger zone. It should be easily accessible (less than 10 seconds or 30 metres away) and free of obstacles.

They should be clearly identified and all personnel who may be required to use this type of equipment should receive appropriate training. Finally, equipment connected to the water system should be operated at least once a week.

• Thermostatic mixing valves (MCL-MTD)

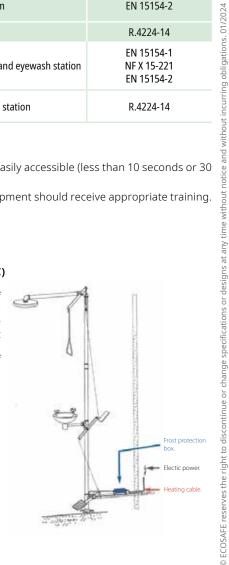
- For eyewash stations: reference MCL
- For showers and combined shower and eye wash station: reference MTD.



HEATING CABLE KIT (KITCC)

In order to avoid the risk of freezing we recommend a heating cable so that the water in your hose does not freeze at -1°C. This system can be used on any model of shower or eye-washer.

Includes: 1 metre of heating cable; 1 power supply kit; 1 frost protection box.



EN 15154-1











COMBINED SHOWERS AND EYEWASH



			Moun-		owl Shower head	Piping			Flow (L/mn)			.+!		NEV
P/N	Use	Opera- ting	ting	Bowl			Supply	Drai- ning	Eye- washer	Shower	(kg)	EN 15154-1	EN 15154-2	NFX 15-221
DLP64	Indoor and outdoor(1)	Hand or foot	Pedestral mounted	Stainless steel + green epoxy paint RAL 6032	Green ABS RAL 6032	Galvanized steel + grey epoxy paint RAL 7040	F1"	F 1 1⁄4″	11,5	90	14	yes	yes	yes
DLI63	Outdoor	Hand or foot	Pedestral mounted	Green ABS RAL 6029 BAS6029	Green ABS RALL 6029	Galvanized steel + green epoxy paint RAL 6029		F 1 1⁄4"	11.5	75	24	yes	yes	yes

(1)Heating cable kit







Fume hoods, filtering cabinets - Ventilation

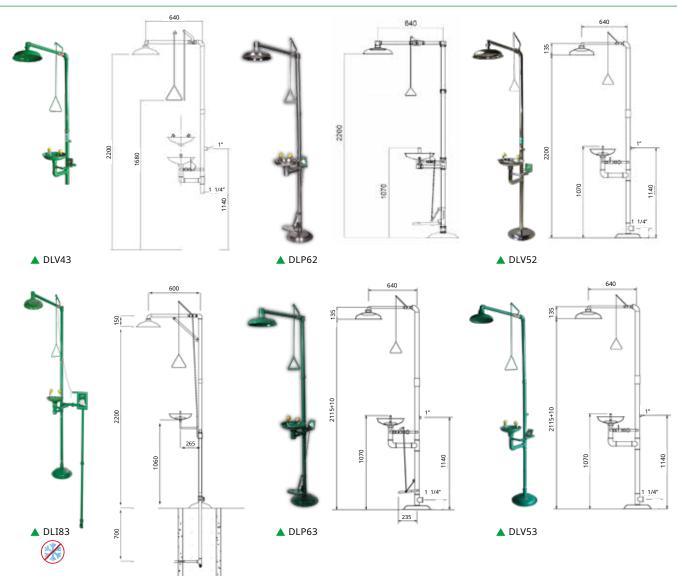
cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

COMBINED SHOWERS AND EYEWASH



		Onere	Maur					Duni	Flow (L/mn)	. Wainba			NEV
P/N	Use	Opera- ting	Moun- ting	Bowl	Shower head	Piping	Supply	Drai- ning	Eye- washer	Shower	(kg)	EN 15154-1	EN 15154-2	NFX 15-221
DLV43	Indoor	Hand	Wall	Green ABS RAL 6029	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	F 1 1⁄4"	11,5	75	19	yes	yes	yes
DLV52	Indoor	Hand	Pedestral	Stainless steel	Stainless steel	Stainless steel	F1"	F 1 1/4"	11,5	75	25	yes	yes	yes
DLV53	Indoor	Hand	Pedestral	Green ABS RAL 6029	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	F 1 1⁄4"	11.5	75	19	yes	yes	yes
DLP62	Indoor	Hand and foot	Pedestral	Stainless steel	Stainless steel	Stainless steel	F1"	F 1 1/4"	11.5	75	25	yes	yes	yes
DLP63	Indoor	Hand and foot	Pedestral	Green ABS RAL 6029	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	F 1 1/4"	11.5	75	23	yes	yes	yes
DLI83	Outdoor	Hand	Pedestral	-	Green ABS RAL 6029	Galvanized steel + green epoxy paintRAL 6029	F1"	F 1 1/4"	11.5	75	30	yes	yes	yes

Containment and cans File cabinets

Anti-fire equipments

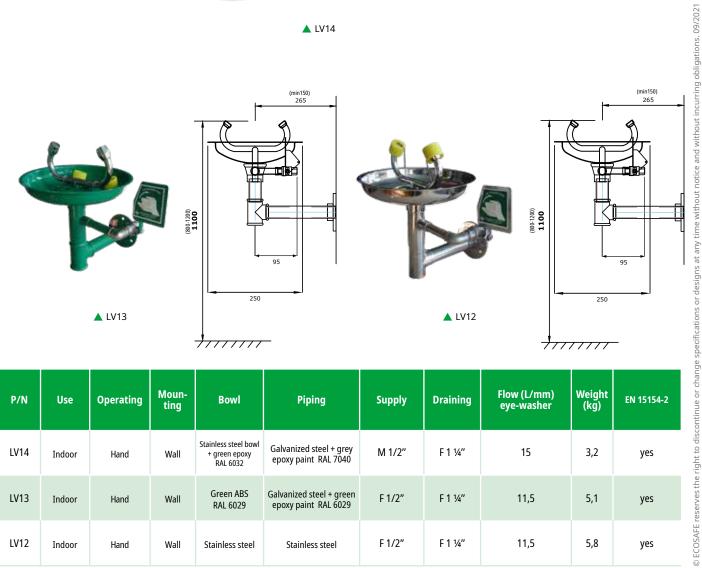
Showers and firstaid equipments



WALL-MOUNTED SAFETY EYEWASH



▲ LV14



P/N	Use	Operating	Moun- ting	Bowl	Piping	Supply	Draining	Flow (L/mm) eye-washer	Weight (kg)	EN 15154-2
LV14	Indoor	Hand	Wall	Stainless steel bowl + green epoxy RAL 6032	Galvanized steel + grey epoxy paint RAL 7040	M 1/2"	F 1 1⁄4"	15	3,2	yes
LV13	Indoor	Hand	Wall	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F 1/2"	F 1 1⁄4″	11,5	5,1	yes
LV12	Indoor	Hand	Wall	Stainless steel	Stainless steel	F 1/2"	F 1 1/4"	11,5	5,8	yes



Fume hoods, filtering cabinets - Ventilation

cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans

File cabinets Anti-fire equipments

FREE-STANDING SAFETY EYEWASH



P/N	Use	Operating	Moun- ting	Bowl	Piping	Supply	Draining	Flow (L/mm) eye-washer	Weight (kg)	EN 15154-2
LP24	Indoor and outdoorr ⁽¹⁾	Hand or foot	Pedestral	Stainless steel bowl + green epoxy paint RAL 6032	Galvanized steel + grey epoxy paint RAL 7040	F 1"	F 1 1⁄4″	15	8	yes
LV22	Indoor	Hand	Pedestral	Stainless steel	Stainless steel	F 1/2"	F 1 1⁄4″	16	10	yes
LP22	Indoor	Foot	Pedestral	Stainless steel	Stainless steel	F 1/2"	F 1 1⁄4″	15	11	yes
LV23	Indoor	Hand	Pedestral	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F 1/2"	F 1 1⁄4"	11,5	10	yes

(1)Heating cable kit

Showers and firstaid equipments





WALL AND FLOOR MOUNTED SAFETY SHOWERS









							Flow (L/mn)			
P/N	Use	Operating	Moun- ting	Shower head	Piping	Supply	Eye- washer	Shower	Weight (kg)	EN 15154-1	NFX15-221
DS13	Indoor	Hand	Wall	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	7	5	5	yes	yes
DS24	Indoor	Hand	Wall	Green ABS RAL 6032	Galvanized steel + grey epoxy paint RAL 7040	F1"	90		4	yes	yes
DS23	Indoor	Hand	Wall	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	7	5	4,4	yes	yes
DS32	Indoor	Hand	Pedestral	Stainless steel	Stainless steel	F1"	7	5	15	yes	yes
DS33	Indoor	Hand	Pedestral	Green ABS RAL 6029	Galvanized steel + green epoxy paint RAL 6029	F1"	7	5	14	yes	yes







Fume hoods, filtering

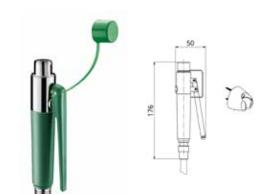
cabinets - Ventilation

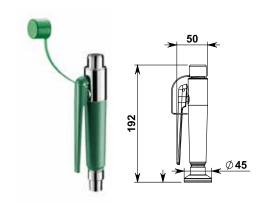
cabinets

Flammable cabinets

Corrosive

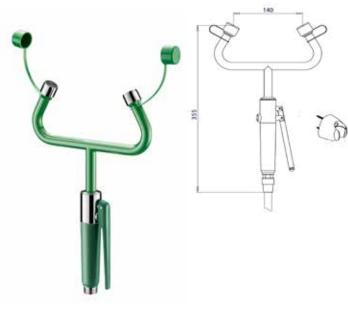
OCULAR SHOWER





▲ DS04

▲ DS54





▲ LV04

▲ LV54

P/N	Use	Operating	Mounting	Flexible (m)	Supply	Flow (L/mn) Eye-washer	Weight (kg)	EN 15154-2	
DS04	Indoor	Hand	Wall mounted (wall bracket supplied)	1,5	M1/2"	6	1	yes	
DS54	Indoor	Hand	Deck mounted	1,5	M1/2"	6	1	yes	
LV04	Indoor	Hand	Wall mounted (wall bracket supplied)	1,5	M1/2"	6	1,5	yes	
LV54	Indoor	Hand	Deck mounted	1,5	M1/2"	6	1.	yes	

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Anti-fire equipments File cabinets

Showers and firstaid equipments





STAND-ALONE PORTABLE SHOWERS



PORTABLE AUTONOMOUS SHOWERS

- Green epoxy paint. Capacity 6 or 9 litres
- · Polyamide and fibreglass spray nozzle
- Delivered with a CO2 gas cartridge already mounted
- · Caution: Delivered empty, to be filled with mineral water only; Do not use in direct contact with the eyes.

P/N	Description	Weight (kg)	Informations
DPA6	Stand-alone portable shower - 6L (H460 x Ø180 mm)	4	Delivered empty - Delivered with 1 x 40g CO2 cartridge
DPA9	Stand-alone portable shower - 9L (H605 x Ø180 mm)	5	Delivered empty - Delivered with 1 x 60g CO2 cartridge
CDPA6	40g spare CO ² cartridge	0,2	fits DPA6
CDPA9	60g spare CO ² cartridge	0,3	suitable for DPA9

GREEN POLYETHYLENE WALL CASE AND INSPECTION KIT FOR SAFETY SHOWERS





▲ C09

▲ KDS

KDS

- Allows testing of safety showers.
- · Cone-shaped cover allows safety showers to be tested without
- · Clamping strap for holding the kit during testing.
- · Easy to use with lockable telescopic handle.

C06/C09

- Fully recyclable PEMD, resistant to most chemicals and UV light Automotive grade rubber seal
- UV-blocking polycharcoalate windows moulded in the mass.
- · Right or left hand door mounting. Door mounting is reversible on both models.
- · Safety pin and plastic toggle with each case.
- Green «first aid» color.
- The boxes are waterproof thanks to a rubber seal and polycharcoalate windows.
- Safe storage solution for your portable stand-alone showers.

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Weight (kg)
C06	Box for stand-alone portable shower 6 litres (DPA6)	700 x 300 x 255	625 x 260 x 195	4
C09	Box for stand-alone portable shower 9 litres (DPA9)	830 x 310 x 265	750 x 270 x 220	5,5
KDS	Inspection kit for safety connected shower	1800 x Ø250	-	1



Fume hoods, filtering

Flammable

Corrosive

MEDICINE CABINETS

HIGH CABINETS FOR MEDICINE







Chest for toxic products

TECHNICAL CHARACTERISTICS

- 10/10th steel construction.
- White epoxy paint RAL 9010.
- · Signalling by Standardized «first aid» symbol.
- · Height adjustable shelves on racks.
- Hinged door(s) with key lock.
- · Toxic products chest as standard.
- Dimensions: H 370 x W 600 x D 450 mm.

▲ AS5DD

- Reinforces the protection of your hazardous products.
- · Box serving as a shelf with a step.
- Signage by Standardized «toxic» symbol.
- · Hinged door with key lock.
- · Different lock and keys for the cabinet and the chest.

OPTION

Additional shelf.

WALL-MOUNTED MEDICINE CABINETS

TECHNICAL CHARACTERISTICS

- 10/10th steel construction.
- · White epoxy paint RAL 9010.
- Signalling by Standardized «first aid» symbol.Height adjustable shelves on racks.
- · Hinged door with key lock.





▲ MF25

▲ MF15

P/N	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Number of shelves	Weight (kg)
MF15	Wall mounted medecine cabinet (small model)	380 x 470 x 205	370 x 460 x 170	2	10
MF25	Wall mounted medecine cabine (tall model)	580 x 470 x 205	570 x 460 x 170	4	15
AS5	One door tall medicine cabinet	1825 x 560 x 545	1795 x 555 x 480	3x EE1 + box	80
AS5DD	Two doors tall medecine cabinet	1825 x 1100 x 545	1795 x 1095 x 480	3x ESASDD + 1x EE1 + box	155
EE1	Additional shelf for AS5	22 x 550 x 465	-	-	3
ESASDD	Additional shelf for AS5D	20 x 1090 x 465	-	-	6

and Multirisk



STAND-ALONE EYEWASH



▲ S1F



▲ FR200



▲ FR200PH









▲ FR500





▲ SM2F



WALL MOUNTED EYE-WASHERS AND STATIONS

				Delivered wit	h: Bootle (ml)	
P/N	Description	Weight (kg)		um Chloride (green)	pH neutral solution (blue)	
			200	500	200	
SM1F	Eye-wash station with 1 bottle 500 ml	0,9	-	1	-	
SM2F	Eye-wash station with 2 bottles 500 ml	1,7	-	2	-	
SF2F	Eye-wash closed station with 2 bottles 500 ml	1,8	-	2	-	
S1F	Belt bag with 1 bottle 200 ml for eyes	0,5	1	-	-	
SP2F	Station with 2 bottles for body and eyes	1,2	-	1	1	

CONSUMMABLES

CONSONI	MADELS		
P/N	Description	Weight (kg)	Suitable for
FR200	200ml bottle with sterile sodium chloride solution	0,4	S1F
FR500	500ml bottle with sterile sodium chloride solution (set of 2 bottles)	1,2	SM1F - SM2F - SF2F - SP2F - KLY
FR500PH	500 ml bottle with pH Neutral solution	1,2	-
FR200PH	200 ml bottle with pH Neutral solution	0,3	SP2F





PORTABLE DECONTAMINATION SHOWER AND SPRAY









▲ SD3+3

GENERAL

These decontamination products are to be used for rapid and effective decontamination of the body and surfaces in contact with corrosive and toxic hazardous substances such as:

▲ SD1

- · strong acids and bases
- oxidants
- formaldehyde
- phenols
- · organic solvents
- · hydrofluoric acid and fluorides

COMPLIANCE

Certification as a class I medical device. In accordance with the requirements of European Regulation 2017/745.

ADVANTAGE

- · For first aid after contact with dangerous substances directly at the scene of an accident
- Very fast-acting
- · Easy to handle
- · For decontaminating several people or areas of up to 50 m2 depending on the version
- · Shelf life: 3 years
- DD5: supplied as a kit (pump + solution canister + funnel).
- SD1: portable pocket decontamination version, easy to take with you.

• SD3+3 dual-component: One contains ascorbic acid dissolved in polyethylene glycol and glycerine. The other contains the amino acid glycine and calcium chloride dissolved in water. This system means that SD3+3 can be used several times without the products mixing and becoming unusable. The two solutions are mixed in a 1:1 ratio and microbiologically stabilised with benzoic acid, diluting the ingredients to 5% as with SD1 and DD5.

TECHNICAL DATA

- · The actives substances contained inside the decontaminating body shower are: ascorbic acid, an acid pad and calcium ions.
- · Glycerin, polyethylene and glycol serve as soluble solution for the organic products.
- · Not being a flammable, nor corrosive, nor toxic for the health, it is not classified as a dangerous substance.
- Storage temperature: between 3°C and 35°C

RECYCLING

 ADVANTAGE For first aid after contact with dangerous substances directly at the scene of an accident Very fast-acting Easy to handle For decontaminating several people or areas of up to 50 m2 depending on the version Shelf life: 3 years DD5: supplied as a kit (pump + solution canister + funnel). SD1: portable pocket decontamination version, easy to take with you. 			PECYCLING Non used solution and bottles partially empty must me eliminated according to local standards. Packaging to be discharged according to regulation 97/129/CE REMINDER: ref DD5 & SD1 have only ONE usage and should not be recharged. Dimensions H x W x Ø (mm) Quantity (L) Weight (kg) 800 x 220 x 180 5 10 290 x 110 x 60 0,3 + 0,3 1 130 x 65 x 31 0,1 0,175				
P/N	Description		Dimensions H x W x Ø (mm)	Quantity (L)	Weight (kg)	ie or change	
DD5	Portable decontaminating body shower		800 x 220 x 180	5	10	it to discontinu	
SD3+3	Dual-component decontamination spray		290 x 110 x 60	0,3 + 0,3	1	serves the righ	
SD1	Portable decontamination solution		130 x 65 x 31	0,1	0,175	© ECOSAFE res	

Fume hoods, filtering

Name : Function :

«INSITU» SOLUTION 1/2 - VERSION 2021

ompany name :			
Address :			
Postal code and town :			
Building - Floor - Room :			
Delivery contact name :			
Telephone number for delivery :			
Opening hours :			
Dealer's name :	Related order n° :	_	
1/Delivery possible from today: otherwise from :		□yes //	□no -
2/ Access by lorries over 3.5 ton if no, by lorry weighing less than need a lorry with a tailgate for u	n 3.5 tonnes (additional fee) :	□yes □yes □yes	□no □no □no
3/ If several cabinets are deliver all be delivered in the same roo		□yes	□no
4/ Dockside delivery, ground flo (50-metre roll included; beyond	or with a maximum of 2 steps to climb that, additional fee):), □yes	□no
- Number of step(s):		□0	
– Delivery to first floor by lift:		□yes	□no
Floor (indicate the floor of eac Floor to be specifiedMandatory checks:	:h room) :	□Floor	
a) Distance between the unload of equipment (additional fee)	ling area and the location	□≤ 50 m	□> 50 m
How many extra metres :	m		
b) Positioning equipment in the (allow an extra 10 cm on each d to your calculation):	lift limension and add the weight of a mar	□yes n to your	□no
c) When driving over obstacles (extra height in your calculation		□yes	□no
d) Permissible load on the grou than weight of equipment an	nd at the intended location greater d products to be stored:	□yes	□no
If condition c) is not met, we invequipment.	ite you to contact our sales departmen	t in order to de	termine the proper
If you answered «no» to any of the Please complete delivery question	ne questions in point 4, the service reque onnaire 2 on the next page.	ested requires f	urther information.

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Stamp and

signature:

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«INSITU» SOLUTION 2/2 - VERSION 2021

PLEASE NOTE: IN ADDITION TO QUESTIONNAIRE NO. 1, FOR INSTALLATION BY CARRYING

1/If condition c) is not met, we invite you to contact our sales department in order to determine the proper equipment.

2/ Would you like a specialist to visit you to draw up an estimate for installing the equipment? (additional fee):

Any erroneous or missing information that does not allow the equipment to be delivered will result in the service being re-invoiced in full.

3/ Stairway(s):

Please note: Allow an extra 20 cm for each of the cabinet dimensions (height, width and depth) to ensure that the cabinet will fit properly on the stairs.

ТҮРЕ	Dimensions utiles	Hauteur de plafond minimum	Étage ou sous-sol	Revêtement
Spiral staircase				
Straight				
Turning				
TA bearing(s) Number to be specified				

Door(s) to be crossed:

-	Numl	ber	:		d	oor	(S)
---	------	-----	---	--	---	-----	----	---

- [Ͻi	men	sions	in	cm	:	heigh ^a	t	Χ	Wid	th	

Additional information :		

SERVICES INCLUDED

Delivery	Delivery with 50 m drive from the unloading area to the equipment location	
Organisation	Delivery on the day agreed between the service provider and the recipient	
Take back	Collection of pallets and packaging]
MSE1	Check that the equipment is properly secured	1
MSE2	Connection between the box and the cabinet (if delivered together)	1
MSFL	Fitting the filter for the 12 and H Series	1
MSPL	Install the glass worktop on the H Series	

ADDITIONAL FEES

Site visit	On-site technician for quotation
Rolling	Rolling over 50 m - Rate per additional 50 m
Truck < 3.5 T	Difficult access requiring a carrier < 3.5 T
Day of delivery	Imperative delivery day
Time of delivery	Time of delivery required

Name : Function : Stamp and signature:

GENERAL TERMS FOR PRODUCTS SALES AND SUPPLEMENTARY SERVICE - 03/2021

1. FIELD OF APPLICATIONS

These general sales conditions apply exclusively to any product sales or services associated with those sales, carried out by ECOSAFE SA.

Any order to our Company implies total acceptance by the buyer of these terms and sales conditions, which prevail over any other terms and purchase conditions, except special dispensations included in the particular

The supplier commits himself to providing the necessary and sufficient means of carrying out the contractual services under the best conditions according to the rule book, the standards and regulations in force.

2. SEEING TO THE PURCHASER DEMAND

2.1 The command

2.1.1 Order methods

Any order must be sent to us in writing (by e-mail, or fax or mail) based on the catalogue and tariff in force or on the estimate addressed to the customer, and will only be definitely accepted by our Company after a written order confirmation (order acknowledgment of receipt).

The estimates on tariffs are set according to the customer's needs.

Any order cancellation or modification will only be taken into account after a written formal agreement by our

Likewise, any extension to the required initial services will call for a new or complementary estimate submitted to the same process as explained above.

Considering the products and services and after a customer's request, any estimate will have to be followed by a written acceptance by the customer and by our acknowledgement of receipt.

In any case, any carried out service will be worth a tacit acceptance of the estimate by the customer.

Any order accepted by our written confirmation will commit us towards our customer and our service.

However, in case of a war, a banning or embargo put on import on export, raw materials, or energy supplying stoppage, break of data processing or telecommunication systems, civil war or cases considered as absolute necessity systems..., we will be allowed to pass off our planned delivery or service obligation.

2.2 Delivery and associated services

The delivery times are indicated on our estimated proforma or delivery acknowledgement of receipt.

They are given in all good faith but without commitment.

Our Company does its best to respect them. No delay could justify the order cancellation, or lead to compensations or penalties.

Our delivery times start at the date of the order acknowledgement of receipt.

In case we are out of stock of some products, we reserve the right to deliver partly, after having informed the

Provisions concerning orders and specifying late penalties for instance can only be applied after written and personal acceptance by our company. If the buyer can't receive the goods at the date when they must be delivered (in the order acknowledgment of receipt), all necessary actions will be taken to store them in the best conditions. The customer will be charged for the corresponding costs.

The delivery can only be carried out if the customer is up to date with his obligations towards our Company and of the specific conditions accepted by the customer and ECOSAFE are satisfied.

2.3 Transport and receipt

2.3.1 Products transport

We choose the means of transport we think the most appropriate to our customers and we apply the procedure agreed on the order acknowledgement of receipt.

The customer must warn us about any constrains or restrictions not enabling different types of carriers to

perform their delivery properly.

We mainly use large carriers of 19 tons or more.

The delivery is carried out either by direct delivery to the customer, either by plain notice of the products being

put at his disposal, or by delivery to a forwarder.

Our tariffs are applied from the warehouse to the delivery unloading spot unless a previous agreement is made (installation and setting up costs are not included in our prices).

Our products are transported at the consignee's own risk (article L.133-3 of the commercial low). At the receipt, the consignee is committed to.

- Check the state and quality of the goods received by opening the package in the presence of the
- deliveryman, and before signing the carrier's or delivery slip.

 Write, in case of damaged or missing goods, precise reserves on the transport acknowledgement, explaining clearly their claim.
- Inform the carrier of what is damaged or missing by a recorded delivery letter with an acknowledgement of receipt within 48 hours from the goods delivery, time in conformity with the article 133-3 of the commercial

These checking at the delivery time are essential especially if the packaging does not show external visible signs

In addition to the arrangements to be taken with the carrier, the claims about damages must be written, by

registered letter within 48 hours from the delivery time of the goods at the delivery spot.

This complaint must include the references on the order acknowledgement of receipt and on the delivery slip.

If these prescriptions are not respected, the goods will be considered as definitely accepted by the customer without any damage.

Without any damage.

If the purchaser asks for a delivery at his customer's place, the purchaser must ask his customer to take care (or have it taken care of) the checking by his customer and the reserves at the delivery in compliance with article L-133-3 of the commercial law and if need be ,to, make an appeal against the carrier within the prescribed time(in compliance with article L-133-3 of the Commercial law).

2.3.2 Risk transfer

The risks transfer on sold products is carried out at the goods loading at the warehouse or at the unloading time when the products are received.

2.3.3 Ownership reserve clause

Except in case of a previous decision written by our company, notified to the customer before delivery of each order, we keep entire property of the goods delivered until full payment of its cost, accessories and transport, as

well as until the customer has met his obligations towards our company.

Until then, the delivered products will be considered as deposited and the customer will be charged with all the risks relating to the damages that the concerned products could undergo or risks caused for any reason. Our company will be able to use its rights (as explained above) for any of its claims on all the products owned by the purchaser.

The products which are still owned by our company must not be sold again or transformed.

However, understanding the needs of the purchaser's activity, we allow him to resell the goods, provided that

he pays the full remaining price he owes at reception, the corresponding sums being, from now on, secured at our benefit according to the dispositions of Article 2071 of the civil law, the purchaser will be the simple depository of the price.

We reserve ourselves the right to cancel any sale and take back all the goods being subject to ownership reserve if an invoice at the settlement date is not paid up after a formal notice to the buyer.

In case an adjustment or compulsory liquidation procedure is required, under way order delivery or not, will be automatically adjourned waiting for a regularization. This clause doesn't rule out a possible damages action from our company, to compensate for the loss of profit or prejudice put up with.

2.3.4 Receipt refusal or delivery impossibility

For any goods in delivery, refused without a good reason, or impossible to be delivered for various reasons: wrong address, unsuitable building, lack of receiving clerk, erroneous delivery time, or another circumstance external our control, the total cost of re-delivery will be chargeable to the customer.

2.3.5 Goods return

Without a previous written agreement from our sales or administration department which will specify the return mode and will send a return slip to the customer, no return will be accepted.

If accepted, the goods will be returned in their original packaging carriage paid, to the address mentioned to

The out of standard articles will not be taken back.

A 30 % set price of the total gross amount, tax free, will be charged for inspection and putting the goods back into the stock in addition to the return transport, as well as specific handling.

Moreover, any return acceptance, which must be definite and previous is subjected to the following conditions.

- The customer must set out a written request for the return of the delivered product in a maximum time limit of seven weekdays from the delivery time. The product must be strictly homemade
- The returned product must be new, unused along with all its accessories, its literature and be in its original intact packaging The customer has to organize the transport of returned goods or sent back products. However, if the customer wishes to organize the transport by himself, he must meet the risks, responsibilities and transport costs of the products. The return must be insured by the customer.

No return will be accepted for the products subjected to associated services, except if the customer meets all the costs of these services.

If these conditions are not respected, the return will not be accepted, since our company will not take on any responsibility about the risks undergone by these products even if those ones are in our warehouse; In case we write a confirmation, a file number will be sent to the customer as well as instructions to be followed

about the return procedure. If a complaint is justified, our responsibility will be limited to the replacement of the product or to its repayment if we are short of it.

2.4 In case of sale of maintenance service

2.4.1 At the picking upAt the picking up of the product, the parties carry out a contradictory inventory added to the intervention report. This inventory enables the service provider to:

- · See and know the product be commits himself to maintain by this contract, and to notify the state as well as the conditions of use.
- · Check the conformity of the products to be maintained with the norms and regulations in force.

In case of discovered non-conformity, which may involve risks for goods and people safety or for the environment or an advanced state of wear material, the provider will only start the services described in this contract if the customer carries out the necessary works to make it conform or replace the product in poor condition beforehand.

In this case, the signed contract only takes effect after the works of compliance or replacement of the materials in poor conditions have been carried out and when the two parties have signed it.

The original of this report is kept by the provider. There will be no inventory when this contract is about the

installation of a product manufactured by the supplier and it takes effect as soon as the works receipt.

2.4.2 Under contract services

The services to be carried out are detailed in the special conditions which list all the maintenance operations agreed by the parties according to equipment, the subject of the maintenance contract, or in the case of a product sale, all the particulars of the sold product and sale conditions.

The operations carried out through this contract are in conformity with recommendations of the manufacturers

of the goods to be maintained. They are written, after each intervention, on a visiting report signed by the supplier and the customer, the original being kept by the customer.

The supplier can exceptionally resort to subcontractors for the whole or part of the service, but he commits

himself to quaranteeing the intervention

2.4.3. Conditions for a maintenance intervention

2.4.3.1 Maintenance visits

The number of maintenance visits requires an agreement between the two parties and is specified in the particular conditions.

For these maintenance visits, an appointment is made at least 7 days before with the customer, who can ask to

put it off for all least 2 weekdays before the date.

At the request of the customer, the supplier specifies if the visit takes place in the morning or in the afternoon according to his organization.

Any recorded absence of the customer brings about an additional invoice on the basis fixed in the particular

conditions.
Each intervention of preventive or corrective maintenance will bring about the setting up of a detailed intervention report of the carried-out service on the spot and if need be, will be worth a voucher of the statutory control visit of the installations.

This report signed both by the customer and the supplier, will include, in addition to the parties identity and the maintenance contract references:

- · The date, time, place, and duration of the intervention
- The technician name
- The faults noticed and the technician remarks in the installations state
- The parts replacement expected or unexpected
- And if need be :
- The description of the breakdown of the service carried out, of the replacements carried or to be carried out.
- Any useful remark, as well as possible follow up to the intervention, if need be.

2.4.3.2 Repairs

The repairs are not included in the basic services of this contract.

The fixing and repairing operations bring about an estimate the customer must accept beforehand. The times (days, hours) and intervention deadline are stipulated in the particular conditions. The expenses caused by there fixing operations (travelling, labour, parts and material) are invoiced over and above this contract, according to the modes and costs set up in the particular conditions. As well for a visit requested by the customer if it turns out to be unjustified.

discontinue or

© ECOSAFE reserves the right to

3. DURATION AND DENUNCIATION OF THE CONTRACT

The duration of this contract is specified in the particular conditions. This contract takes effect at the date when it was signed or by default at the date of the order. It can be dependent on the preliminary carrying out (paid by the customer) of compliance works of the installation or of replacement of advanced state of wear materials according to the conditions specified in article 2.4.1 of these general conditions.

This contract is renewable by tacit agreement for the same duration, except denunciation by one or the other party sent by registered letter with recorded delivery at least 3 months before the end of the contract.

without

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© ECOSAFE reserves the right

4. MODIFICATION/TERMINATION OF THE CONTRACT

4.1. Modification

The replacement or modification of materials or parts of materials concerned by this contract and described in the particular conditions, while the contract is valid, entails the modification of the contract by an additional clause previously subjected to the customer acceptance with the receipt and contradictory inventory

Any modification of the valid contract necessitated by a statutory or normative evolution equally entails an

4.2 Contract termination

4.2 Contract cerimination.
After a notice by registered letter with registered receipt, unanswered for a fortnight, this contract is resiliated ex officio as soon as the notice addressed to the defaulting party by registered letter has been received, in the following cases:

- Non-payment of the amounts owed to the company within the time allowed and as agreed.
- Non-respect of contractual obligations by one or the other party.

5. PRICES – PAYMENT CONDITIONS

5.1 Payment conditions

Unless mentioned on our acknowledgment of receipt the products must be paid cash. We only accept wire transfers by bank. However, in agreement with our financial department, some other payment conditions can

To open an account, a fixed price will be required in order to submit the matter to our credit insurer. In fact, for the customers who are registered in our account books, we apply the usual payment conditions such as by draft for 30 days from the invoice date. The amounts paid before the delivery are considered as advance payment and not as a deposit. Therefore, they don't give any right to the buyer to terminate the sales contract. We reserve ourselves the possibility to treat some money sendings against refund.

For payments from abroad, the customer will be charged with all the fees or a fixed price will be applied to

make up for that.

5.2 Late payment

In conformity with Article L441-6 of the commercial code, if the supplier wishes, any late payment will lead to (as soon as the first day of delay).

- The enforcement of a late interest equal to the latest financing rate of the European central Bank put up by 10 points (law of Economy modernization LME - N° 2008-776 august 4th 2008.
- The application of a lump sum for collection costs of 40 Euros (European directive 2011/7 of February 16th 2011, law 2012-387 of march 22nd 2012 and decree 2012-1115 of October 2012), when the collection costs are superior to this lump sum an additional compensation with a written proof will be applied.

Any default of payment at due date as well as any refusal to accept a bill of exchange, when it turns up, leads to

(if the salesman wishes), the suspension or termination of any pending order.

The payment of a partial delivery becomes compulsory at the maturity date written on the corresponding bill, and not when the rest is delivered.

Any deterioration of the buyer's credit can justify the requirement of guarantees or a cash payment before the

orders are fulfilled.

The sums owed to ECOSAFE can neither deferred, nor reduced, nor compensated without written agreement with ECOSAFE.

No reduction in the guaranty is accepted by ECOSAFE except if it has been previously duly accepted. Therefore, any mention of this reduction in the general terms of purchase is therefore void.

5.3 SALES OF MATERIALS AND MENTIONS IN THE CATALOGUE

Whatever the care we take in our catalogue and website, errors can creep into them, and the customer will not make us responsible for them. We insist on the fact that all characteristics, dimensions, weights, colors, photographs, and so on appearing in our catalogue are just information and are liable to be modified, without notice, their intrinsic qualities remaining unchanged. Before any sale, there will be a reminder of all the characteristics of the material sold in our particular conditions. The technical specifications contained in our valid catalogue and website cancel and replace those previously published. In the same way, prices or quotations indicated in our catalogues, and the price list are valid at the time of their printing or distribution. They cancel and replace all previously indicated quotations and prices. All our prices are calculated excluding VAT.

5.4 MAINTENANCE SERVICE

To make up for the contractual services, the customer must pay the price agreed when the contract was signed according to the terms defined in the particular conditions. If the start of the contractual services has been conditioned to the previous carrying out of works for compliance or material replacement, in accordance with article 2 of these general conditions, the starting point of the payment deadlines is the date when the findings about the works carrying out have been signed. This price is revised annually on the 1st of January and will trigger off a postal or e-mail to warn about the new applicable prices. The payment schedule will be expressly mentioned in the particular conditions, otherwise see article 5.1.

5.5 ADDITIONALLY INVOICED SERVICES AND SUPPLIES

For any help, repair or visit, justified or not, asked by the customer and not included in the planned contractual visits, the travelling and labour expenses will be invoiced according to the terms defined in the particular conditions. Various parts and supplies are also charged in addition according to article 4-2 of these general conditions. The invoices are payable on receipt except for particular conditions

6. OBLIGATIONS AND RESPONSIBILITY

6.1 Obligations of the customer

All the equipments we manufacture and supply are exclusively intended for users of dangerous products under their own responsibility. These products meet the requirements of European Security standards. The customers who want to use products bought in non-European country must ensure that they are in conformity with the regulations of this country. And the customer commits himself to using and maintaining the buildings where these materials are located. He mustn't modify the conditions of intervention or the good working order of the materials. The accessibility or use of the materials must always be allowed to the supplier in particular, no fitting out, later than the contract signature will hamper or prevent the maintenance operations. As well the manufacturer's prescriptions will have to be insured.

The customer can't modify or have the materials modified in any way when they are concerned by this present contract nor adjust them without previously informing the provider and get his agreement. We wouldn't be responsible for an improper use (on lack of conformity with local legislation) of these supplies. In confirmity with article 18 of Decree 2005.829 on the composition of electrical and electronic equipment and the elimination of waste from this equipment, the obligations related to the organisation and financing of the removal and treatment of these wastes are transferred to the customer and will be under his responsibility, once, the sale has been carried out.

6.2 OBLIGATION OF THE PROVIDER

6.2.1 ON THE MATERIAL SALE

We commit ourselves to the good quality of the materials we use and sale as well as their conformity. The new materials and goods we sale are guaranteed against any manufacturing defect for one year from the date indicated on the delivery form. Our guarantee only applies in case of a conception defect or a latent defection. It only covers the materials replacement of the parts found defective by our quality and technical department. It is strictly limited to the repairing of the materials in our workshops. When guaranteed, the material will be removed from the customer's workshop in the conditions planned when it was initially delivered. Spare parts are guaranteed 3 months after their installation.

The present guarantee will not be applied if the goods have not been stored, used or maintained by the user in compliance with usage, as well as any user's instruction, nor in case of material damaged by the user or anyone else, nor when the material would have been modified or repaired by the user or anyone else without our written agreement, nor in case of normal wear, or in case of no-payment at the deadline of the whole or a part of the material's price.

The activation of the guarantee will not entail an extension of its term.

Our guarantee stops legally as soon as the buyer has not informed us of this defect notice within 7 days after he has discovered it (date that he must prove). The guarantee is excluded in the following cases :

- Normal wear of the product.
- Use of spare parts not manufactured by us.
 Modification of the product or incompatibility with other materials

- Abnormal or non-conform use of the product in relation with its own specifications or bad storage or maintenance by the custome
- Bad installation of the product.
- Damage caused by corros

6.2.2 ON THE SALE OF SUPPLEMENTARY SERVICES

We commit ourselves on the good quality of our maintenance as well as on the good repairing we eventually carried out. In any case, we commit ourselves to ensuring the good use of the installation insofar as all the installation or possible compliance rules have been respected by the customer.

6.3 RESPONSIBILITY LIMITS OF THE PROVIDER

The provider can't be responsible for the consequences, or any damage entailed by:

- Any intervention, wrong movement, spite from the customer or unknow intervention.
 If the client doesn't respect the obligations listed in 8.1 article of the present general conditions.
- In case of a war, a fire, a disaster due to natural phenomena (such as frost, flood, storm or earthquake), rodents or other animals, a stopping or breakdown, in the electrical supply, an electrical overvoltage, a use in an over polluted atmosphere (oily and/or corrosive vapour, too much dust, etc..).
- · No compliance of the installations, either before the contract is effective (as in article 4 of the inventory slip), or during the contract validity if the customer has been duly informed of the necessity of works on the installations to set them in compliance with the regulation (the maintenance works are performed only when the installations have been set in compliance beforehand). For lack of this, the company will not allow an exemption of responsibility
- Or more generally for any action (intervention,...) of the customer or somebody else than the provider.

7. INSURANCES

7.1 CUSTOMER OBLIGATIONS

The customer declares he has signed a contract (local comprehensive insurance) including at least responsibility, damage by fire and electrical damage guarantees, for sufficient amounts of guarantees to cover the damages

7.2 PROVIDER OBLIGATIONS

The provider declares he has signed an insurance policy covering his civil liability within the context of his activities in relation with the present contract.

The insurance certificate of the provider is at the disposal of the customer if he requires it.

8. END OF THE CONTRACT

For any materials sale contract, excepting recurrence the contract will come to an end when the sale is effective and the service is paid.

For any maintenance contract coming to an end and not being renewed, a contradictory inventory will be carried out at the customer's expense at the end of the contract.

9. CONTRACT INTERPRETATION AND LITIGATION

The validity, interpretation of the contract and carrying out of the present general conditions, as well as agreed services, are subjected to the French law.

In case of a dispute, before any contentions action, the parties will first look for a friendly agreement.

If the conflict is unresolved, the competent court will be the court of the head office of the Company.

This clause is applied to any litigation, whatever the subject or particularities and the clauses attributing a court (notified in the client's documents) can't constitute an obstacle.

10. PRIVACY POLICY OF YOUR PERSONAL DATA

The protection of personal data is a major concern of ECOSAFE.

We deal with personal data in accordance with the French and European legislation about personal data

Collection of personal data:

Please note that, within the context of our commercial relationships, the following personal data will be stored and treated by ECOSAFE, which is responsible for the treating: name, first name, address, phone number, e-mail address, department, company and function if necessary.

These data come from you or your company

Details of the processing responsible : M. THIEULIN

Could you note that the collected information is subjected to a data-processing treating only intended to carry out our service and the contract which binds us, and that the processing is necessary to the signing of the contract of which you are a party or to the carrying out of pre-contractual measures taken at your request. We assure you that any appropriate guarantee has been taken in order to secure the collection and use of your personal data on our Web site. We would like to specify that the host of our site is located in Canada; personal data on our web site, we would like to specify that the host of our site is located in Carlada; Your personal data will also be integrated into our software of commercial data management, kept up by our IT service providers, who have also committed themselves to respecting all the rules in relation to the protection of the data they will be able to have access to within the context of control and maintenance operations Unless otherwise noted, we also are likely to transmit the information concerning you, to our partners or providers in change of transport, for the delivery of the ordered products.

In case of commercial relations (canvassing or order) all the data stemming from the commercial relation will be kept in our database only for the necessary time to reach the pursued goal while they were collected for 3 years. Then they may be filed for a longer period until the retention time (legally set or agreed with the company for 10 years) is over, depending on the concerned data and our commercial relations.

User's rights

In accordance with the European regulation in force, you take advantage of the following rights. Right of access, rectification, updating, complementing your own data, right of deleting personal data when they are wrong, incomplete, dubious, outdated, right to withdraw your consent at any time, right to limit data processing, right to transfer data, right of opposition.

We draw your attention on the fact that in case the personal data wouldn't have been provided or in the event of

a revocation, the carrying out by ECOSAFE of any order or contractual obligation would be made more difficult, or even impossible

you wish to assert your rights towards ECOSAFE, you can contact us by mail or e-mail at the following address : Chemin des Champs-Courbe - 1024 ECUBLENS (Suisse) - sales@ecosafesa.com

Please specify the object of your demand and give us same information allowing us to make sure of you identity. For example, your name, function as well as the name and address of your company, your order number or the type of relations you have with our company. Please also specify the rights you intend to exercise. We will reply to your demand within a month time limit, except in case of an impossibility we will inform you about. In this case, you must indicate the personal data you wish to correct, update or delete and give your precise

identity with a copy of an identity document (national ID card or passport). The demands of deletion of personal data will be subjected to the obligations imposed on ECOSAFE by law, especially as regards keeping or filing of documents.

11. INTELLECTUAL PROPERTY

Photographs, diagrams, logos and texts on our commercial documentation in paper or digital format, including Web sites, registered or not down on an intellectual property office, belong exclusively to ECOSAFE. Any breach

and belong to their respective owner.

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