



















## REMINDER OF STANDARDS AND LEGISLATION

	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.
	cennp 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.
	INRS recommendations 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 disabling 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.

	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 or group of mobile containers 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.
<b>CLP</b>	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 physically separated.
<b>REACH</b>	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.
<b>NF EN 13501-1</b>	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.
<b>NF EN 13501-2</b>	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

										
<b>I explode</b>		×	×	×	×	×	×	×	✓	×
<b>I make it blaze</b>		×	✓	×	×	×	×	×	✓	×
<b>I'm on fire</b>		×	×	✓	×	×	×	×	×	×
<b>I'm under pressure</b>		×	×	×	✓	×	×	×	×	×
<b>I gnaw</b>		×	×	×	×	×	×	×	×	×
<b>I kill</b>		×	×	×	×	×	×	×	×	×
<b>I do serious harm</b>		×	×	×	×	×	×	×	×	×
<b>I damage health and the ozone layer</b>		✓	✓	×	×	×	×	×	×	×
<b>I pollute</b>		×	×	×	×	×	×	×	×	×

- ✗ Cannot be stored together
- Can be stored together under some conditions
- ✓ 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 I.N.R.S. 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.