

# SAFETY CABINETS FOR FLAMMABLE AND EXPLOSIVE PRODUCTS



Showers and first-aid equipments

Anti-fire equipments and Files cabinets

Retention and cans

Fume hoods, filtering cabinets - Ventilation

Pesticide range

Toxic cabinets and multirisk

Corrosive cabinets

Flammable cabinets



# SAFETY CABINETS FOR FLAMMABLES



## GENERAL RULES:

For obvious and safety reasons (fires, explosions, corrosions, intoxications, ...) all dangerous chemicals have to be handled and stored with great precaution. This brochure will provide you with storage solutions for your flammables, according to your security needs. No matter what your activity area is (e.g. workshop, laboratory, store-room, manufacturing premises, industrial hall, ...), the products can be very flammable or them highly flammable, you must always store your chemicals safely. Do not hesitate to contact us for any personal advice.

In this catalog you will find adapted storage solutions for your flammable products according to your security constraints. No matter your business branch (workshop, laboratory, warehouse, manufacture ...) or the degree of flammability of your products, they have to be safety stored.

Feel free to call us for a fast and personalized advice.

## What is a Safety cabinet for flammables?

Safety cabinets for flammables protect chemicals (by extension also human beings, animals and personal belongings) from fire risks or unusual heating sources. The fire protection is assured by keeping the flammables into the cabinet. This is done by various means: automatic doors closing (available on some of our models) and / or thermo-expanding seals of the doors allowing to isolate the internal body – or also the availability of thermo-fuses which automatically seal off the ventilation system (EN 14470). Some models are also equipped with a fire-extinguisher unit within the cabinet, thus preventing fire to break out in the Safety cabinet.

## NORMS AND REGULATIONS:

### European Norm EN 14470-1 AND EN 14470-2:

It is applicable for storage of flammables in laboratories and highly flammable chemicals.

The flammables used in laboratories must be stored in one or several safety cabinets which are fire-resistant for 15, 30, 60 or 90 minutes (please refer to our catalogue "EN-14470": Safety cabinets tested and certified EN 14470-1 or 14470-2).

### FM (Factory Mutual):

Offers worldwide industrial and commercial product certification and testing services through its business unit FM Approvals. Recognized and respected across the worldwide, FM Approvals certification assures customers that a product or service has been objectively tested and conforms to the highest national and international standards. The certification FM requires a fire-resistance of 10 minutes for Safety cabinets, according to the heat curve NFPA 251-1969.

### EN ISO 1182:

The insulation must be heat-proof and non-flammable.

## CHOOSE YOUR SAFETY CABINET ACCORDING TO YOUR ACTIVITY AND TO THE DEGREE OF FLAMMABILITY OF THE CHEMICALS YOU USE AND STORE:

PE (Flash point)*	Degree of flammability	Product examples	Recommended safety cabinets	
			In Industry	In Laboratories
Higher than 55°C	LITTLE FLAMMABLE	Fuel, Gas oil	Range 1, 2, 7.15**/***, 7.EN 15 min**/***	Range 7.15**/*** 7.EN 15 min**/***
Between 21°C et 55°C	FLAMMABLE	Oil of turpentine, white spirit	Range 1, 2, 3, 7.30**, 7.EN 30 min**	Range 7.30**, 7.EN 30 min**
Between 0°C et 21°C	EASILY FLAMMABLE	Ethanol, methanol	Range 2, 5, 7.60**	Range 7.60**
Under 0°C	EXTREMELY FLAMMABLE	Acetone, ether	Range 7.90**, 7.EN 90 min**	Range 7.90**, 7.EN 90 min**

\* (Flash point): Lowest temperature at which a liquid could form gas/air mixtures, able to burn with an ignition source.

\*\* Please check our brochure EN 14470 tested and certified Safety cabinets.

\*\*\* Not appropriate for Germany.

## In this part of the catalog you will find:

Safety cabinets with extinguisher for flammable products	CNPP	Range 1
FM safety cabinets for flammable products	FM	Range 2
Safety storage for Toxic, Noxious or Flammable products	ISO 1182	Range 3/ 5
Ventilation and Filtration Boxes	I.N.R.S.	Range V



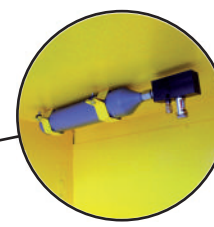
NF EN ISO 1182

EN 14470-1

# RANGE 1



## SAFETY CABINETS WITH EXTINGUISHER FOR FLAMMABLE PRODUCTS



EX500G



To protect the users health and to improve the life cycle of your safety cabinet, we recommend to install an exhausting system. Do not hesitate to contact-us for more information.

### CONFORMITY

- Normalized labelling according to ISO 3864 and 92/58/CEE european directive.

### ADVANTAGES

- Large retention tank for AMS 100 and AMS 200 models.
- Automatic self extinguishing in case of fire.
- Sloping roof to avoid unauthorized storage.

### PASSIVE SECURITY

- Built in steel 15/10<sup>th</sup>.
- Epoxy paint :
  - Beige RAL 1013 (for AMS10 & AMS 20);
  - Yellow RAL 1023 (for AMS100 & AMS 200).
- «Flammable» large warning labels.
- 3 adjustable perforated shelves (except AMS10 and AMS20 models, one non-ajustable shelf).
- Retention tank at the bottom.

### ACTIVE SECURITY

- Equipped with a CO<sub>2</sub> extinguisher:
  - 120g for AMS10 and AMS20 models;
  - 500g for AMS100 and AMS200 models.
- Automatic release by thermic bulb (between 65 and 72°C).
- High and low vent Ø 100 mm with flame arresters (except AMS10 and AMS20 models).
- Self-closing double doors (except AMS10 and AMS20 models, one self-closing door).
- Key locking system.

### OPTIONS

- Additional perforated shelf for AMS100 and AMS200 models.
- Spare extinguisher.
- These cabinets are also available without extinguisher. Contact-us for more information.

### EUROPEAN MANUFACTURE

Reference	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Equipped with a CO <sub>2</sub> extinguisher	Storage capacity (L)	Retention capacity (L)	Number of shelves	Weight (Kg)
AMS10	455 x 500 x 250	260 x 490 x 220	120 g	10	10	1	12
AMS20	500 x 700 x 250	260 x 690 x 220	120 g	20	15	1	20
AMS100	1500 x 800 x 400	1220 X 780 X 380	500 g	100	112	3	70
AMS100SE			no				
AMS200	1800 x 1000 x 400	1530 X 890 X 380	500 g	200	130	3	100
AMS200SE			no				
ESAMS1	30 x 780 x 380	Additional shelf for AMS100 and AMS100SE					8
ESAMS2	30 x 980 x 380	Additional shelf for AMS200 and AMS200SE					10
EX120G	CO <sub>2</sub> extinguisher for AMS10 and AMS20						0,2
EX500G	CO <sub>2</sub> extinguisher for AMS100 and AMS200						0,6

The manufacturer keeps the right to modify technical characteristics without notice. 01/2014

Flammable cabinets

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**RANGE 2****FM - NFPA - OSHA**

## FM SAFETY CABINETS for flammable products



Fusible links hold doors wide open and melt at 74°C for automatic closure\*



Continuous piano hinge



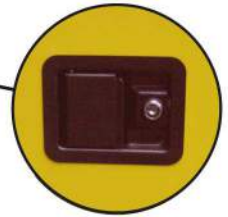
Vent with built-in flame arresters



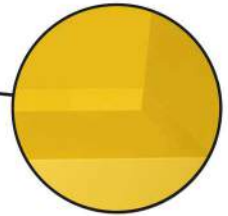
Model : SC45



Adjustable shelves



Integrated locking handle.



Liquid-tight containment sump

### DIRECTIVES & NORMS

- In accordance with NFPA (National Fire Protection Association), OSHA (Occupational Safety and Health Administration), and FM (Factory Mutual international) regulations.

### ADVANTAGES

- Sturdy construction.
- Integrated locking handle.
- Cabinets with self-closing doors. The fusible links hold doors wide open and melt at 74°C for automatic closure\*
- Continuous piano hinge provides smooth closure.
- Many models are available.

**All FM approved cabinets are recommended by the U.S. insurance companies.**

### PASSIVE SECURITY

- Built in double wall steel with 38 mm of insulating air space.
- Yellow epoxy paint.
- Adjustable shelves.
- 50 mm liquid-tight containment sump.
- Built in grounding connector.

### ACTIVE SECURITY

- Lateral high and low vent Ø 2" (50mm) with flame arresters.
- Continuous piano hinge.
- Manual or self-closing doors.
- 3 points lock with fail-safe closing mechanism and locking handle.
- Key locking system.

### OPTIONS

- Additional shelf.
- Absorbing carpets (ref. JF10).
- Ventilation or filtration boxes.

\* On self-closing models.

# RANGE 2

# FM - NFPA - OSHA



Ref.	Door types	Description	External dimension H x W x D (mm)	Internal dimension H x W x D (mm)	Storage capacity (L)	Retention capacity (L)	Number of shelves	W. (kg)	
MB04	Manual	Under-bench cabinet with 1 door	610 x 430 x 430	465 x 345 x 360	15	6	1	30	
SB04	Self-closing							32	
MB12	Manual	Working cover cabinet with 1 door	940 x 610 x 460	795 x 510 x 390	45	10	1	65	
SB12	Self-closing							67	
ES12	-	Additional shelf for 45L cabinet							3
MB18	Manual	Under-bench cabinet with 2 doors	610 x 1090 x 460	515 x 1005 x 390	64	20	1	75	
SB18	Self-closing							78	
ES18	-	Additional shelf for 64L cabinet							4
MB22	Manual	Tall cabinet with 1 door	1650 x 585 x 460	1560 x 500 x 390	83	10	3	90	
SB22	Self-closing							92	
ES22	-	Additional shelf for 83L cabinet							2
MB30	Manual	Working cover cabinet with 2 doors	1120 x 1090 x 460	1025 x 1005 x 390	113	20	1	105	
SB30	Self-closing							108	
ES30	-	Additional shelf for 113L cabinet							4
MC45	Manual	Tall cabinet with 2 doors	1650 x 1090 x 460	1560 x 1005 x 390	170	20	2	140	
SC45	Self-closing							143	
ES45	-	Additional shelf for 170L cabinet							4
MC60	Manual	Tall cabinet with 2 doors	1650 x 860 x 860	1560 x 770 x 780	228	30	2	170	
SC60	Self-closing							173	
ES60	-	Additional shelf for 228L cabinet							8
MC90**	Manual	Tall cabinet with 2 doors	1650 x 1100 x 860	1560 x 1020 x 780	340	40	2	220	
SC90**	Self-closing							223	
ES90**	-	Additional shelf for 340L cabinet							10

\*\* Model not on stock and not shown on the picture.



Some models of Range 2 FM safety cabinets are designed to stack on Range 4 cabinets. Contact-us for more information.

To protect the users health and to improve the life cycle and the safety of your cabinet, we recommend to install an exhausting system. Contact us for additional information.

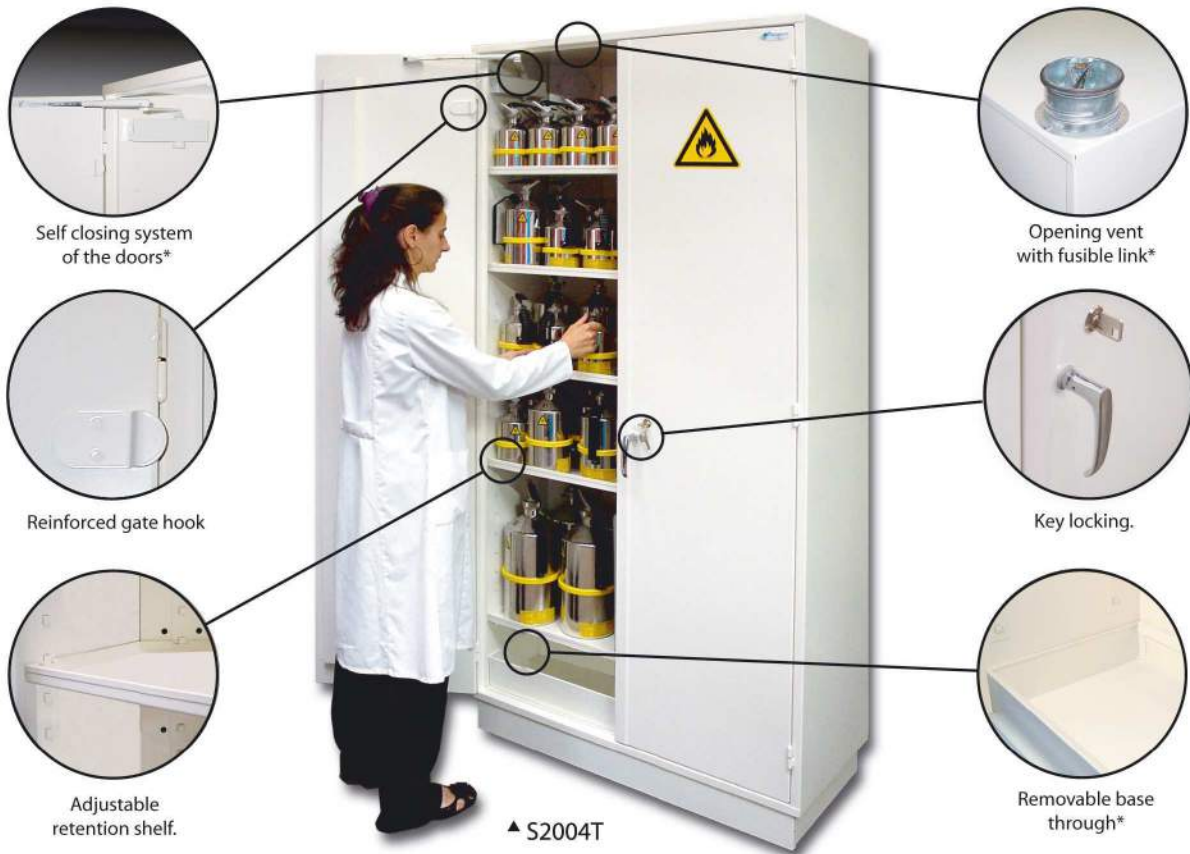




**RANGE 3/5****EN ISO 1182**

# SAFETY STORAGE CABINETS

## for Toxic, Noxious or Flammable products



▲ S2004T

### DIRECTIVES & NORMS

- In accordance with EN ISO 1182.
- Normalized labelling according to ISO 3864 norm and 92/58/CEE directive.

### ADVANTAGES

- Large storage capacity.
- Cabinets for various families of products storage (noxious, toxics and flammables) with same design for a better homogeneity.

### PASSIVE SECURITY

- Built in double wall steel 12/10<sup>th</sup>.
- 20 mm thickness of mineral fibre insulation.
- White epoxy paint RAL 9010.
- "Toxics", "Noxious" or "Flammables" large warning label.
- Adjustable retention shelves.

### ACTIVE SECURITY

- Inside lateral ventilation shaft with high opening and connecting piece Ø 100 mm.
- Ventilation outlet on the roof with connecting sleeve (Ø 100 mm).
- Reinforced gate hook, sealing off by 2 points lock.
- Key locking.

**EUROPEAN MANUFACTURE**

### OPTIONS

- Additional retention shelf (G03, G04 or G06).
- Retention shelf in PVC (EP03, EP04 or EP06).
- Base through in steel (GL03, GL04 or GL06).
- Base through in PVC (BP03, BP04 or BP06).
- Absorbing carpets (ref. JF10).

### ADDITIONAL EQUIPMENT OF THE RANGE 5

- Removable base through in steel at the bottom.
- Self closing system of the doors.
- Opening vent with fusible link

### RANGE 5 OPTIONS

- Open doors locking system with self closing system at 70°C.
- Additional retention shelf (G03, G04 or G06).
- Retention shelf in PVC (EP03, EP04 or EP06).
- Base through in PVC (BP03, BP04 or BP06).

### Ventilation and Filtration Boxes

To protect the users health and to improve the life cycle of your safety cabinet, we recommend to install an exhausting system. Do not hesitate to contact-us for more information.



\* Only for Range 5 cabinets or in option for Range 3.

# RANGE 3/5

# EN ISO 1182



## RANGE 3

Reference	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (l)	Number of shelves	W. (kg)
SV50	Under-bench cabinet (depth: 450 mm)	750* x 1000 x 450	650 x 950 x 400	50	1	62
G803G	Low cabinet (depth: 300 mm)	895 x 1000 x 300	745 x 950 x 250	70	1	58
G804G	Low cabinet (depth: 450 mm)	895 x 1000 x 450	745 x 950 x 400	100	1	68
G806G	Low cabinet (depth: 600 mm)	895 x 1000 x 600	745 x 950 x 550	135	1	82
G1204E	Working cover cabinet (depth: 450 mm)	1295 x 1000 x 450	1145 x 950 x 400	150	3	92
G2004B	Tall cabinet (depth: 450 mm)	2095 x 1000 x 450	1945 x 950 x 400	250	5	145
G2006B	Tall cabinet (depth: 600 mm)	2095 x 1000 x 600	1945 x 950 x 550	300	5	166

## RANGE 5

Reference	Description	External dim. H x W x D (mm)	Internal dim. H x W x D (mm)	Storage capacity (l)	Number of shelves	W. (kg)
S604T	Under-bench cabinet (depth: 450 mm)	750* x 1000 x 450	650 x 950 x 400	50	1	69
S804T	Low cabinet (depth: 450 mm)	895 x 1000 x 450	745 x 950 x 400	100	1	75
S806T	Low cabinet (depth: 600 mm)	895 x 1000 x 600	745 x 950 x 550	135	1	90
S1204T	Working cover cabinet (depth: 450 mm)	1295 x 1000 x 450	1145 x 950 x 400	150	3	99
S2004T	Tall cabinet (depth: 450 mm)	2095 x 1000 x 450	1945 x 950 x 400	250	5	152
S2006T	Tall cabinet (depth: 600 mm)	2095 x 1000 x 600	1945 x 950 x 550	300	5	174

## OPTIONS

Reference	Description	W. (kg)
G03	Additional shelf for G803G	3
G04	Additional shelf for SV50-G804G-G1204E-G2004B-S604T-S804T-S1204T-S2004T	4
G06	Additional shelf for G806G-G2006B-S806T-S2006T	5
EP03	Retention shelf in PVC for G803G	6
EP04	Retention shelf in PVC for SV50-G804G-G1204E-G2004B-S604T-S804T-S1204T-S2004T	6
EP06	Retention shelf in PVC for G806G-G2006B-S806T-S2006T	6
GL03	Base trough for G803G (100mm height)	4
GL04	Base trough for SV50-G804G-G1204E-G2004B (100mm height)	5
GL06	Base trough for G806G-G2006B (100mm height)	6
BP03	Base trough in PVC for G803G (100mm height)	3
BP04	Base trough in PVC for SV50-G804G-G1204E-G2004B-S604T-S804T-S1204T-S2004T (100mm height)	4
BP06	Base trough in PVC for G806G-G2006B-S806T-S2006T (100mm height)	5
FTR5	Self closing system at 70°C with open doors locking system (must be ordered together with the cabinet)	-

\* In option: height 670 mm. Contact us for more information.

The manufacturer keeps the right to modify technical characteristics without notice. Edition 02/2011.

Flammable  
cabinets

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and Files cabinets

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aid equipments



**RANGE V****ISO 3744 CE**

# VENTILATION AND FILTRATION BOXES

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



CDF-P  
+ option KRC



## VENTILATION BOX (CDV-A)

### USE AREA

The electric fan allows the extraction of toxic vapours generated inside your safety cabinet.

### CONFORMITY

Electric fan in compliance with ISO 3744; CE marking.

### ADVANTAGES

- Adaptable to all of our cabinets.
- Simple and aesthetic fitting.
- Easy connection between the cabinet and the vent box.
- Connection by flexible tube Ø 100mm (in option).
- Lighting control allowing to survey the proper working of the fan.

### TECHNICAL SPECIFICATIONS

- Built in steel 12/10<sup>th</sup>, white epoxy paint RAL 9010.
- Electric engine with switch ON/OFF with lighting control.
  - 220/240 volts - 50Hz - 97 W - 0,54 A - 55,5 dB(A) (excluding air flow).
  - Flow: 215m<sup>3</sup>/h - Protection: IP44
  - Exhaust inlet and outlet: Ø 100 mm.

### CONNECTING KIT OPTION (KRC)

It allows to connect easily your ventilation or filtration box with any cabinet. It includes:



- 1 sleeve diameter 100mm, ref CHJ, to fix on the exhaust of the cabinet.
- 1 meter of flexible tube diameter 100mm ref KL 100.
- 2 clamp diameter 100mm, ref CDS 100.

## FILTRATION BOXES (CDF-A for flammable and toxic vapours and CDF-P for corrosive vapours)

### USE AREA

The electric fan allows the exhaust of toxic vapours generated inside your safety cabinet. The vapours are purified by the active coal filter and rejected without danger in the atmosphere.

### CONFORMITY

- CE marking.

### ADVANTAGES

- Adaptable to all of our cabinets.
- No modification of building's structure required.
- Simple and aesthetic fitting.
- Easy connection between the cabinet and the vent box.
- Connection by flexible tube Ø 100mm (in option).

### TECHNICAL SPECIFICATIONS

#### Filtration box CDF-A model (not shown on the picture)

- Built in steel 12/10<sup>th</sup>; White epoxy paint RAL 9010.

#### Filtration box CDF-P model

- Built in Cellular PVC; White colour.

Each box contains 2 independent compartments:

#### Filtration compartment:

- "Candle" type active coal filter H150 x Ø 150mm : ref. CDFORG on CDF-A model and CDFCORG on CDF-P model; must be changed at least once a year.
- Filter settled on the box by 3 lugs and airtightness insured thanks to a rubber seal.

#### Ventilation compartment:

- Electric engine :
  - 220/240 volts - 50 Hz - 20 W - 0,09 A - 43 dB(A) (excluding air flow).
  - Flow: 86 m<sup>3</sup>/h - Protection: IP20.
  - Exhaust inlet and outlet: Ø 100 mm.

Reference	Description	Overall dimensions H x W x D (mm)	Equipped with active coal filter	Weight (kg)
CDV-A	Ventilation box in steel	235 x 235 x 250	no	8
CDF-A	Filtration box in steel with filter	285 x 410 x 285	CDFORG	13
CDF-P	Filtration box in cellular PVC with filter	305 x 580 x 300	CDFCORG	10
KRC	Connecting kit for box	-	-	1
KL100	1 metre flexible tube Ø 100 mm	-	-	0,2
CHJ	Connection unit Ø 100mm	-	-	0,1
CDS100	Clamp collar Ø 100mm	-	-	-
CDFORG	Active coal filter for organic vapours	<b>Filter must be changed at least once a year</b>		3
CDFCORG	Active coal filter for corrosive and organic vapours			3
CDFFOR	Active charcoal filter for formaldehyde vapors			3

<sup>(1)</sup> The latest generation "CORG" filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.