

# BECOME Perchloric Acid fume cupboards



## Application

The BECOME Perchloric Acid fume cupboard is designed and tested in accordance with the EN 14175 standard. Recommended for the evacuation of perchloric acid fumes. Not recommended for use with compounds emitting ionising radiation, concentrated mineral acids or pathogens.

## Safe Product

Range manufactured under European standard EN 14175 parts 2 and 7. The design of the BECOME Perchloric Acid fume cupboard makes it possible to ensure safety and operating objectives when handling perchloric acid, and avoid dangerous concentrations and deposits in the work area. Interior cabinet made of a single stainless steel sheet, sash made of 3 + 3 mm bi-laminate glass. It has a shower and longitudinal sink to avoid the formation of explosive crystals in the work area.

## Models



1. BECOME Perchloric

## Materials

- Resistant to Chemical Stress: Smooth materials that are easy to clean. Suitable against chemical erosion due to perchloric acid. Cabinet interior made of a single stainless steel (AISI 316) sheet.
- Resistant to Mechanical Stress.

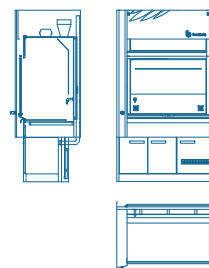
## Optional accessories

- Waste collection.
- Storage under the fume cupboard.

*\*For more details, see the chapter on "Accessories for fume cupboards".*

## Drawings

BECOME Perchloric



## Technical data

### External dimensions

Width (mm)	1.500   1.800
Depth (mm)	950
Height (mm) (*)	2.500

(\*) Minimum recommended laboratory height for Perchloric Acid: 3.000 mm See lower heights.

### Interior dimensions

Width (mm)	1.225   1.525
Depth (mm)	740/620
Height (mm)	1.215

All dimensional data Tol: +/- 5mm

## Technical data

### Work dimensions

Work height (mm)	900
Maximum operational height (mm) (*)	500
Recommended distance from sash (area directly behind the sash) (mm)	150
Recommended free space between bulky equipment and the interior walls of the fume cupboard (mm)	100
Recommended elevation of large equipment over the surface of the worktop (mm)	25 to 50

(\*) When working, keep the sash as low as possible or closed, for th greater protection of the user and lower energy consumption. In the case of installing bulky equipment inside fume cupboards, it is recommended that in situ tests are carried out to ensure containment in these circumstances.

## Technical Characteristics

Models	B Perchloric Acid 1500	B Perchloric Acid1800
Frame	Side frames made of steel pipe, with sheet metal lids, coated with polyester resin. Lower frame.	
Worktop	Worktop made of a 20 mm thick stainless steel (AISI 316) sheet on a support board. Interior of the cabinet welded without joints.	
Interior of the cabinet	AISI 316 stainless steel sheet made in a single piece with rounded joints. Resistant to chemical account. Interior of the cabinet welded without joints.	
Shower	Shower at the top of the deflector to prevent the formation of explosive crystals. At the back of the work area there is a hole running lengthwise to evacuate the water from the shower.	
Sash	Sash made of 3 + 3 mm bi-laminate glass.	
No. of sashes	1	
No. of Horizontal Rails	2	
<b>Services (**)</b>		
LED lighting ( 20W)	2	2
230V/16A IP55 power sockets	4	
Magneto-thermal protection	1 x 16A	
<b>Optional services (**)</b>		
Water tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body and EPDM seal. Maximum working pressure of 10 bar.	
Combustible gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Taps with safety lock. Brass body, ceramic seal with a nitrile gasket. Maximum working pressure of 07 bar.	
Instrumental gas tap with remote control	Acid-resistant handle with identification code in accordance with EN 13792. Brass body, fine adjustment valve, PTFE shut-off. Acid-resistant epoxy powder coating.	
Pressure reducers for instrumental gasses	Compact design, brass body, with shut-off and control valve and pressure display. Maximum input pressure of 20 bar, output pressure of 1.0 bar to 8.0 bar. Optional tap for fine tuning.	

Pressure reducers for corrosive gases	Compact design, stainless steel body, with shut-off and control valve and pressure display. Maximum input pressure of 20 bar, output pressure of 1.0 bar to 8.0 bar. Optional tap for fine tuning.
Power sockets (***)	Socket voltage 230V - 16A.
	Socket voltage 230V - 13A.
	Computer socket. Telephone socket. Voice and data socket.
Thermal-magnetic cut-outs	16A single-phase thermal magnetic circuit breaker.
	16A three-phase thermal magnetic circuit breaker.
	20A single-phase thermal magnetic circuit breaker.
	20A three-phase thermal magnetic circuit breaker.
Socket power (**)	Single-phase power socket (3 poles) 230V - 16A.
	Single-phase power socket (3 poles) 230 - 32A.
	Three-phase power socket (5 poles) 400V - 16A.
	Three-phase power socket (5 poles) 400V - 32A.
Start / stop for accessories in fume cupboard	Start / stop switch.
	Emergency stop button.

(\*\*) The services will be located on the side and front panels, the configuration will be carried out according to the needs of each customer. Models will be adjusted to the regulations in each country  
(\*\*\*) Optionally, electrical outlets will be installed inside the fume cupboard with an externally-operated safety keypad.

## Technical Installations

Models	B Perchloric Acid 1500	B Perchloric Acid1800
Height of the extraction outlet from the ground (mm) BP	2,470	
Diameter of the extraction outlet (mm) (*)	1 x Ø250	1 x Ø250
Fume Cupboard Control	EO 25 (For details, see the chapter on accessories).	
Test flow rate (**)	467 m <sup>3</sup> /hx mln.	
Maximum pressure in the duct	600Pa.	
Electricity	The installation of shielded hoses and super-immunised protection is recommended for the feed to a fume cupboard or group of fume cupboards.	

(\*) The diameters of the outlet may vary depending on the installation

(\*\*) The flow rate data provided refers to that obtained in the tests in accordance with EN14175 part 7, taking the limit values set by the German conglomerate BG Chemie and the French research institute INRS as a reference for containment. It must not be used to calculate the dimensions of ducts or the HVAC system. Check nominal flow rates.