

Valuable suggestions and hints for dealing with hazardous substances based on European legislation.



The new British Product standard BS-EN 14470-1 for flammable storage cabinets. Allows increased storage volume

The new European Standard EN 14470-1 has now been given the status of a national standard by the British Standard Institute and is formally adopted as BS-EN 14470-1. This new product standard categorises the total fire resistance of a cabinet into four sectors 15, 30, 60 or 90 minutes. The test criteria of this new standard requires cabinets to be subjected to extreme temperature as a complete unit, in order to meet required level of certification. This differs substantially from the previous test criteria, as required in the old highly flammable and liquefies petroleum gases regulation of 1972 to be tested in accordance with BS476, which only requires the integrity of the material form from which the cabinet is to be constructed to be tested.

Safety Cabinets – a necessary for personal protection

Primarily, the BS EN 14 470-1 covers the following major safety requirements:

- **Minimising the fire risks** associated with storing flammable substances and protecting the cabinet's contents in the event of fire **for a known (tested) minimum length of time (fire rating)**
- **Minimising the amount of vapour** released into the working environment
- **Retention of accidental spillage** within the cabinet
- For the first time **fire fighters** are also taken into consideration in the definition of **target of protection**, since the standard takes into account time both for employees to leave and for fire fighters to enter the workplace before the flammable goods stored may turn into an uncontrollable fire.

High Quality standard by DENIOS

Trust in DENIOS and asecos safety cabinets. They comply with all requirements of safety laws and regulations. **All cabinet models sold are tested and comply with the new BS-EN 14470-1.**

Trusting is good , testing is better! – New Regulations

- The fire resistance of the cabinet must be tested in a fire chamber test (type testing). All models of cabinets that have been tested up until now and have fulfilled the national standards have to be retested to fulfil the increased testing criteria
- The structural requirements and the testing conditions have been modified. The procedures and the interpretation of the test are now described in detail
- The fire resistance is classified into 4 categories of fire protection ratings (**Type 15, 30, 60, 90**). The numbers indicate the fire resistance in minutes.
- A new fire chamber test is required for each model of cabinet
- All design variations have undergone separate tests in the fire chamber to ensure that every individual type of cabinet meets the BS-EN 14470-1 standard. An expert's report is also drawn up, it is not possible to have a certificate issued unless this test is done on every unit

Construction and technical features of a fire resistant BS-EN safety cabinet

Special Intumescent Seal Protection Strips

- Expand in the event of fire
- The gaps in the cabinet between door and frame become totally sealed against outside heat in the event of fire

Special Fire Resistant Plates

- Protect stored goods inside the cabinet. The rise of temperature inside the cabinet does not exceed 180 degrees for 15, 30, 60 or 90 minutes, depending on the type of cabinet

Supply and exhaust air system to avoid critical and harmful vapours inside the cabinet

- Those working with the cabinet will not inhale harmful substances
- Keeps the air inside the workroom or laboratory clean
- Prevents an explosive mixture of air and gas arising inside the cabinet

All information provided is compliant with the relevant regulations



The DENIOS hazardous materials handbook

is a useful guide through the jungle of regulations. On its 36 pages you will find up-to-date information on legal requirements and regulations for the storage of hazardous materials and work safety. With this handbook, DENIOS customers will be kept well informed.

Request a copy now!

(Order No. 188-294-71, nominal charge £ 9.50)