

Fire safety storage cabinets —

Part 1: Safety storage cabinets for flammable liquids

The European Standard EN 14470-1:2004:2000 has the status of a British Standard

ICS 13.220.40; 71.040.10

National foreword

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 17 and a back cover.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 11 October 2004

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ISBN 0 580 44560 7

Amendments issued since publication

Amd. No.	Date	Comments

English version

Fire safety storage cabinets - Part 1: Safety storage cabinets for flammable liquids

Armoires de stockage de sécurité incendie - Partie 1:
Armoires de stockage de sécurité pour liquides
inflammables

Feuerwiderstandsfähige Lagerschränke - Teil 1:
Sicherheitsschränke für brennbare Flüssigkeiten

This European Standard was approved by CEN on 2 February 2004.

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Foreword

This document (EN 14470-1:2004) has been prepared by Technical Committee CEN/TC 332 “Laboratory equipment”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2004, and conflicting national standards shall be withdrawn at the latest by October 2004.

Annexes A and B are normative.

This document includes a Bibliography.

EN 14470, *Fire safety storage cabinets*, consists of the following parts:

Part 1 — Safety storage cabinets for flammable liquids

Part 2 — Safety storage cabinets for pressurised gas cylinders (in preparation)

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This European Standard describes the design and testing criteria for safety cabinets to be used in laboratories to store flammable liquids in closed containers at normal room temperatures.

Primarily, this European Standard covers the three major safety requirements for storage of flammable liquids, which are:

- a) minimising the fire risks associated with the storage of flammable substances and protection of the cabinet's contents in the event of fire for a known (tested) minimum length of time (fire rating);
- b) minimising the amount of vapour released into the working environment;
- c) retention of accidental spillage within the cabinet.

Testing of the cabinet [see a) above] under fire conditions is a normative part of the standard and the procedures and interpretation of the tests are described in detail.

The fire test [see a) above] provides for four categories of fire protection / ratings. In practice the degree of fire protection/rating allows the user to select, depending on individual circumstances, a cabinet which will allow sufficient time for personnel to leave, and fire fighters to enter the laboratory before it is likely to that the flammables stored turn a possible minor / extinguishable fire into an uncontrollable one. The methods of achieving b) and c) above are sufficiently flexible to allow for local/national needs.

Caution should be exercised when determining the appropriate cabinet fire rating when flammables having auto-ignition temperatures below 200 °C and/or having high vapour pressures at room temperature are involved. When such flammable materials are being stored, expert advice should be sought.