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Transportable gas cylinders – Gases and gas mixtures – Part 1: Properties of pure gases

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Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

Gasflaskor – Gaser och gasblandningar – Del 1: Egenskaper hos rena gaser

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ICS 23.020.30

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English version

Transportable gas cylinders - Gases and gas mixtures - Part 1: Properties of pure gases

Bouteilles à gaz transportables - Gaz et mélanges de gaz -
Partie 1: Propriétés des gaz purs

Ortsbewegliche Gasflaschen - Gase und Gasgemische -
Teil 1: Eigenschaften von Einzel - Gasen

This European Standard was approved by CEN on 20 December 1998.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

Foreword	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Definitions	5
4 Properties of gas mixtures	5
5 Code number	6
6 List of gases	8

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 23 "Transportable gas cylinders", the secretariat of which is held by BSI.

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 1999, and conflicting national standards shall be withdrawn at the latest by October 1999.

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

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR. Therefore in this context the standards listed in the normative references and covering basic requirements of the RID/ADR not addressed within the present standard are normative only when the standards themselves are

Introduction

In Europe there are 2 existing Directives which deal with the classification of gases. One relates to Dangerous Substances and Preparations, the other to the Transport of Dangerous Goods (ADR). These Directives have several conflicting classifications e.g. Toxicity is expressed in volume parts per million (p.p.m.V) in the ADR Directive and in milligrams per litre (mg/l) in the Substances and Preparations Directive.

The purpose of this standard is to list the properties of individual gases to facilitate the selection of valve outlets.

This is different from the scope of the two Directives mentioned above which are concerned with hazard identification and transport matters respectively.

Consequently this standard is not in conflict with either of the two above Directives as it specifically addresses the risks of mis-connection of equipment eg. Chlorine is not an oxidant according to Transport Regulations, but the risk of mixing this gas with flammable gas is well known and is addressed in this standard.

1 Scope

The purpose of this part of EN 720 is to define the properties of gases on the basis of four main physical-chemical criteria i.e. fire potential, toxicity, state of gas and corrosiveness (see clause 3) for the purpose of the selection of suitable valve outlets.

NOTE : See 3.4 for the definition of corrosiveness.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 720-2	Classification of gases and gas mixtures - Part 2 : Gases and gas mixtures - Determination of fire potential and oxidizing ability
EN ISO 11114-1	Transportable gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 1 : Metallic materials