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

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 720-
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720-1:1999 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 720-1:2001 consists of the English text of the European standard EN 720-1:1999.

This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

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 for the purpose of the selection of suitable valve outlets.

Scope:

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ICS 23.020.30, 71.100.20, 75.160.30

Võtmesõnad: classifications, corrosion, corrosive gases, flammability, gas cylinders, gas mixtures, gases, physico-chemical properties, toxicity

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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 1998-12-20.

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.

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CEN

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

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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

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EN ISO 11114-1 Transportable gas cylinders - Compatibility of cylinder and valve

materials with gas contents - Part 1 : Metallic materials