SLOVENSKI STANDARD
oSIST prEN ISO 13338:2020

01-maj-2020

Plinske jeklenke - Plini in zmesi plinov - Določevanje korozivnosti tkiva za izbiro izhodnega priključka ventila na jeklenki (ISO 13338:2017)

Gas cylinders - Gases and gas mixtures - Determination of tissue corrosiveness for the selection of cylinder valve outlets (ISO 13338:2017)

Gasflaschen - Gase und Gasgemische - Bestimmung der Gewebekorrosivität von Gasen oder Gasgemischen für die Auswahl von Ventilausgängen (ISO 13338:2017)

Bouteilles à gaz - Gaz et mélanges de gaz - Détermination de la corrosivité sur les tissus pour le choix des raccords de sortie de robinets (ISO 13338:2017)

Ta slovenski standard je istoveten z: **prEN ISO 13338**

ICS:

23.020.35	Plinske jeklenke	Gas cylinders
71.100.20	Industrijski plini	Gases for industrial application

oSIST prEN ISO 13338:2020 **en,fr,de**

INTERNATIONAL STANDARD

ISO 13338

Second edition
2017-05

Gas cylinders — Gases and gas mixtures — Determination of tissue corrosiveness for the selection of cylinder valve outlets

Bouteilles à gaz — Gaz et mélanges de gaz — Détermination de la corrosivité sur les tissus pour le choix des raccords de sortie de robinets

Reference number
ISO 13338:2017(E)

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

This second edition cancels and replaces the first edition (ISO 13338:1995), which has been technically revised with the following change:

— Clauses 3, 4 and 5 have been updated.

Introduction

ISO 5145 specifies the dimensions of different valve outlets for different compatible gas groups. These compatible gas groups are determined according to practical criteria defined in ISO 14456.

These criteria are based on certain physical, chemical, toxic and corrosive properties of the gases. In particular, the tissue corrosiveness is considered in this document.

The aim of this document is to assign a classification category for each gas that takes into account the corrosiveness for skin, eyes and the respiratory tract of the gas.

For gas mixtures containing corrosive components, a calculation method based on the additivity method of the GHS is proposed.

However, for gas mixtures containing corrosive gas components, some valve outlets standards require the use of the corrosive category regardless of the corrosive gas concentration.

Gas cylinders — Gases and gas mixtures — Determination of tissue corrosiveness for the selection of cylinder valve outlets

1 Scope

This document provides:

— for pure gases and some liquids, a complete list indicating their corrosiveness;

— for gas mixtures, a calculation method, in the absence of experimental data, relating to the corrosiveness of each of their components;

in order to determine the corrosiveness of gases and gas mixtures on tissue so that a suitable outlet connection can be assigned to each of them.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
tissue corrosiveness of gases or gas mixtures
ability of a gas to damage or destroy living tissues (eyes, skin and mucous membranes)

Note 1 to entry: It corresponds to GHS hazard category skin corrosion 1, 1A, 1B or 1C or GHS hazard category eye damage 1.

3.1.2
irritant gas
gas which may cause a temporary reaction to the skin, eyes and mucous membranes

Note 1 to entry: It corresponds to GHS hazard category skin irritation 2 or GHS hazard category eye irritation 2.

Note 2 to entry: An irritant gas is regarded for the purposes of ISO 14456 as non-corrosive.

3.2 Symbols

L	limit
V	volume
C	indicates a corrosive component
i	indicates an irritant component
nc	indicates a non-corrosive, non-irritant component

4 Classification

ln accordance with the above, gases and gas mixtures are classified into the following categories:

— C: corrosive;

— i: irritant;

— nc: non-corrosive, non-irritant.

For a complete definition for purposes of the gas cylinder connection, the subdivisions of the FTSC code given in the notes to of Table 1 shall also be taken into account:

— 0: non-corrosive (nc or i);

— 1: forms non-halogen acids (C);

— 2: basic (C);

— 3: forms halogen acids (C).

5 Categories of corrosiveness for pure gases

The corrosiveness category of each gas (C, i or nc) corresponding to the classification defined in Clause 3 is shown in Table 1.