ICS 29.260.20 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2020

STN	**Výbušné atmosféry Časť 20-1: Vlastnosti látok na klasifikovanie plynov a pár Skúšobné metódy a údaje (ISO/IEC 80079-20-1: 2017, vrátane Cor 1: 2018)**	**STN EN ISO/IEC 80079-20-1** 38 9630

Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data (ISO/IEC 80079-20-1:2017, including Cor 1:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/20

Obsahuje: EN ISO/IEC 80079-20-1:2019, ISO/IEC 80079-20-1:2017, ISO/IEC 80079-20-1:2017/Cor 1:2018

Oznámením tejto normy sa od 30.04.2022 ruší
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NORME EUROPÉENNE

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EN ISO/IEC 80079-20-1

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Supersedes EN 60079-20-1:2010

English Version

Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data (ISO/IEC 80079-20-1:2017, including Cor 1:2018)

Atmosphères explosives - Partie 20-1 : Caractéristiques des produits pour le classement des gaz et des vapeurs - Méthodes et données d'essai (ISO/CEI 80079-20-1:2017, y compris Cor 1:2018)

Explosionsfähige Atmosphären - Stoffliche Eigenschaften zur Klassifizierung von Gasen und Dämpfen - Teil 20-1: Prüfverfahren und Daten (ISO/IEC 80079-20-1:2017, einschließlich Cor 1:2018)

This European Standard was approved by CEN on 8 January 2018.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 20 November 2019.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO/IEC 80079-20-1:2019 E

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European foreword

This document (EN ISO/IEC 80079-20-1:2019) has been prepared by Technical Committee ISO/TMB "Technical Management Board - groups" in collaboration with Technical Committee CEN/TC 305 “Potentially explosive atmospheres - Explosion prevention and protection” 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2022.

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This document supersedes EN 60079-20-1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZA, which is an integral part of this document.

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Endorsement notice

The text of ISO/IEC 80079-20-1:2017, including Cor 1:2018 has been approved by CEN as EN ISO/IEC 80079-20-1:2019 without any modification.

Annex ZA

(informative)

Relationship between this European Standard and the essential requirements of Directive 2014/34/EU aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/BC/CEN/92/46 to provide one voluntary means of conforming to essential requirements of Directive 2014/34/EU "Directive 2014/34/EU Of The European Parliament And Of The Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres (recast)".

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 2014/34/EU

Essential Requirements of Directive 2014/34/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.0.1	All clauses	

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ISO/IEC 80079-20-1

Edition 1.0 2017-12

INTERNATIONAL STANDARD

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ISO/IEC 80079-20-1:2017-12(en-fr)

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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EXPLOSIVE ATMOSPHERES –

Part 20-1: Material characteristics for gas and vapour classification – Test methods and data

FOREWORD

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International Standard ISO/IEC 80079-20-1 has been prepared by subcommittee 31M: Non-electrical equipment and protective systems for explosive atmospheres, of IEC technical committee 31: Equipment for explosive atmospheres.

This first edition of ISO/IEC 80079-20-1 cancels and replaces IEC 60079-20-1:2010. It constitutes a technical revision. No significant changes were made with respect to IEC 60079-20-1:2010.

It is published as a double logo standard.

The text of this standard is based on the following documents:

FDIS	Report on voting
31M/122/FDIS	31M/126/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60079 series, under the general title: *Explosive atmospheres*, as well as the International Standard 80079 series, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,
- replaced by a revised edition, or
- amended.

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EXPLOSIVE ATMOSPHERES –

Part 20-1: Material characteristics for gas and vapour classification – Test methods and data

1 Scope

This part of ISO/IEC 80079 provides guidance on classification of gases and vapours. It describes a test method intended for the measurement of the maximum experimental safe gaps (MESG) for gas-air mixtures or vapour-air mixtures under normal conditions of temperature and pressure (20 °C, 101,3 kPa) so as to permit the selection of an appropriate group of equipment. This document also describes a test method intended for use in the determination of the auto-ignition temperature (AIT) of a vapour-air mixture or gas-air mixture at atmospheric pressure, so as to permit the selection of an appropriate temperature class of equipment.

Values of chemical properties of materials are provided to assist in the selection of equipment to be used in hazardous areas. Further data may be added as the results of validated tests become available.

The materials and the characteristics included in a table (see Annex B) have been selected with particular reference to the use of equipment in hazardous areas. The data in this document have been taken from a number of references which are given in the bibliography.

These methods for determining the MESG or the AIT may also be used for gas-air-inert mixtures or vapour-air-inert mixtures. However, data on air-inert mixtures are not tabulated.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-426, *International Electrotechnical Vocabulary − Part 426: Electrical apparatus for explosive atmospheres* (available at http://www.electropedia.org/)

IEC 60079-11, *Explosive atmospheres − Part 11: Equipment protection by intrinsic safety "i"*

IEC 60079-14, *Explosive atmospheres − Part 14: Electrical installations design, selection and erection*