

SC31M publications generated on 2024-04-04					
Reference	Edition	Corrigenda/IS	Date	Title	Language
ISO 80079-36:2016/COR1:2019	Edition 1.0	1	2019-10-22	Corrigendum 1 - Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements	EN-FR
ISO/IEC 80079-34:2018	Edition 2.0		2018-08-30	Explosive atmospheres - Part 34: Application of quality management systems for Ex Product manufacture	EN-FR, ES

ISO/IEC 80079-20-1:2017/COR1:2018	Edition 1.0	1	2018-07-25	Corrigendum 1 - Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data	EN-FR
ISO/IEC 80079-20-1:2017	Edition 1.0		2017-12-14	Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data	EN-FR, ES

ISO/IEC 80079-20-2:2016/COR1:2017	Edition 1.0	1	2017-03-14	Corrigendum 1 - Explosive atmospheres - Part 20-2: Material characteristics - Combustible dusts test methods	EN-FR
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ISO 80079-36:2016	Edition 1.0		2016-02-26	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements	EN-FR
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ISO 80079-37:2016	Edition 1.0		2016-02-26	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"	EN-FR
ISO/IEC 80079-20-2:2016	Edition 1.0		2016-02-18	Explosive atmospheres - Part 20- 2: Material characteristics - Combustible dusts test methods	EN-FR

ISO/IEC 80079-38:2016	Edition 1.0		2016-02-18	Explosive atmospheres - Part 38: Equipment and components in explosive atmospheres in underground mines	EN-FR

Description
<p>ISO/IEC 80079-20-1: 2017 is published as a dual log standard and 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.</p> <p>Keywords: classification of gases and vapours</p>

ISO/IEC 80079-20-2:2016 is published as a dual logo standard and describes the test methods for the identification of combustible dust and combustible dust layers in order to permit classification of areas where such materials exist for the purpose of the proper selection and installation of electrical and mechanical equipment for use in the presence of combustible dust. The standard atmospheric conditions for determination of characteristics of combustible dusts are:
- temperature -20 °C to 60 °C,
- pressure 80 kPa (0,8 bar) to 110 kPa (1,1 bar) and
- air with normal oxygen content, typically 21 % v/v. The test methods defined do not apply to:
- recognized explosives, propellants (e.g. gunpowder, dynamite), or substances or mixtures of substances which may, under some circumstances, behave in a similar manner or
- dusts of explosives and propellants that do not require atmospheric oxygen for combustion, or to pyrophoric substances. This first edition cancels and replaces the first edition of IEC 61241-2-1 published in 1994, the first edition of IEC 61241-2-2 published in 1993 and the first edition of IEC 61241-2-3 published in 1994, combining the requirements into a single document, and is considered to constitute a technical revision. Significant changes with respect to IEC 61241-2-1:1994, IEC 61241-2-2:1993 and IEC 61241-2-3:1994 can be

<div>ISO/IEC 80079-34:2018 specifies particular requirements and information for establishing and maintaining a quality management system to manufacture Ex Products in accordance with the certificates. While it does not preclude the use of other quality management systems that are compatible with the objectives of ISO 9001:2015 and which provide equivalent results, the minimum requirements are given in this document.</div> <div>This second edition cancels and replaces the first edition, published in 2011, and constitutes a full technical revision. The significant changes with respect to the previous edition should be considered as minor technical revisions. However, the clause numbering in regard to the previous edition has changed in order to be in line with ISO 9001:2015. The normal “Table of Significant Changes” has not been included for this reason.
 This publication is published as a double logo standard. This standard should be read in conjunction with ISO 9001:2015</div>

ISO/IEC 80079-38:2016 is published as a dual logo standard and specifies the explosion protection requirements for the design, construction, assessment and information for use (maintenance, repair, marking) of equipment that may be an individual item or form an assembly. This includes machinery and components for use in mines susceptible to explosive atmospheres of firedamp and/or combustible dust. The standard atmospheric conditions (relating to the explosion characteristics of the atmosphere) under which it may be assumed that equipment can be operated are:
- temperature - 20 °C to 60 °C;
- pressure 80 kPa (0,8 bar) to 110 kPa (1,1 bar);
- and air with normal oxygen content, typically 21 % v/v. This part of ISO/IEC 80079 applies for equipment and components according to EPL Mb to be used in explosive atmospheres containing firedamp and/or combustible dust. For equipment and components according to EPL Ma, the requirements of this standard and of ISO 80079-36 and IEC 60079-0 apply. It is necessary to take account of external conditions to the equipment which may affect the hazard and the resultant protection measures. These measures may include ventilation, gas detection or gas drainage. This part of ISO/IEC 80079 also deals with the prevention of ignitions of

ISO 80079-36:2016 specifies the basic method and requirements for design, construction, testing and marking of non-electrical Ex equipment, Ex Components, protective systems, devices and assemblies of these products that have their own potential ignition sources and are intended for use in explosive atmospheres. Hand tools and manually operated equipment without energy storage are excluded from the scope of this standard. This standard does not address the safety of static autonomous process equipment when it is not part of equipment referred to in this standard. This standard does not specify requirements for safety, other than those directly related to the risk of ignition which may then lead to an explosion. The standard atmospheric conditions (relating to the explosion characteristics of the atmosphere) under which it may be assumed that equipment can be operated are:
- temperature -20 °C to 60 °C;
- pressure 80 kPa (0,8 bar) to 110 kPa (1,1 bar); and
- air with normal oxygen content, typically 21 % v/v. Such atmospheres can also exist inside the equipment. In addition, the external atmosphere can be drawn inside the equipment by natural breathing produced as a result of fluctuations in the equipment's internal operating pressure, and/or temperature. This part of ISO/IEC 80079

ISO 80079-37:2016 specifies the requirements for the design and construction of non-electrical equipment, intended for use in explosive atmospheres, protected by the types of protection constructional safety "c", control of ignition source "b" and liquid immersion "k". This part of ISO/IEC 80079 supplements and modifies the requirements in ISO 80079-36. Where a requirement of this standard conflicts with the requirement of ISO 80079-36 the requirement of this standard takes precedence. Types of protection "c", "k" and "b" are not applicable for Group I, EPL Ma without additional protective precautions. The types of ignition protection described in the standard can be used either on their own or in combination with each other to meet the requirements for equipment of Group I, Group II, and Group III depending on the ignition hazard assessment in ISO 80079-36. Keywords: constructional safety "c", control of ignition source "b" and liquid immersion "k"