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Fire extinguishing media — Foam concentrates —

Part 4: Specification for Class A foam concentrates for application on Class A fires

Agents extincteurs — Émulseurs —

Partie 4: Spécifications pour les agents émulseurs destinés à une application par les matières solide combustible



Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 6, *Foam and powder media and firefighting system using foam and powder*.

This corrected version of ISO 7203-4:2022 incorporates the following corrections:

— the publication year included on the cover page and in the headers and footers of the document has been corrected from 2021 to 2022.

A list of all parts in the ISO 7203 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Firefighting foams are widely used to control and extinguish fires of flammable liquids and for inhibiting reignition. They can also be used to prevent the ignition of flammable liquids and, in certain conditions, extinguish fires of solid combustibles.

Foams can be used in combination with other extinguishing media, particularly halocarbons, carbon dioxide and powders, which are the subject of other International Standards, including ISO 6183, ISO 7201-1, ISO 7201-2 and ISO 7202. A specification for foam systems can be found in the ISO 7076 series.

Attention is drawn to [Annex I](#), which deals with the compatibility of foam concentrates.

Attention is also drawn to [Annex J](#), which contains information previously included ISO 3219:1993¹⁾ that is considered relevant to this document.

NOTE ISO 3219:1993 is currently under revision with a view to expansion into a series. The content included in [Annex J](#) has not yet been incorporated into a new Part.

A specification for portable extinguishers can be found in ISO 7165.

1) Cancelled and replaced by ISO 3219-1:2021 and ISO 3219-2:2021.

Fire extinguishing media — Foam concentrates —

Part 4:

Specification for Class A foam concentrates for application on Class A fires

1 Scope

This document specifies the essential properties and performance of liquid foam concentrates used to make foams for the extinguishment and inhibition of reignition of fires of Class A fuels. Minimum performance on certain test fires is specified.

NOTE 1 Class A fires are fires involving solid materials, usually of an organic nature, in which combustion normally takes place with the formation of glowing embers (see 3.16).

NOTE 2 Class A fuels can include materials such as vegetation, wood, cloth, paper, rubber and some plastics (see 3.17).

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.

ISO 304, *Surface active agents — Determination of surface tension by drawing up liquid films*

ISO 3104, *Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity*

ISO 3219-2, *Rheology — Part 2: General principles of rotational and oscillatory rheometry*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 7203-2, *Fire extinguishing media — Foam concentrates — Part 2: Specification for medium- and high-expansion foam concentrates for top application to water-immiscible liquids*

ISO 7203-3, *Fire extinguishing media — Foam concentrates — Part 3: Specification for low-expansion foam concentrates for top application to water-miscible liquids*

EN 1568-3:2018, *Fire extinguishing media — Foam concentrates — Part 3: Specification for low expansion foam concentrates for surface application to water-immiscible liquids*

UNITED NATIONS (UN), *Globally Harmonized System of Classification and Labelling of Chemicals*, 4th revised edition (2011)²⁾

3 Terms and definitions

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

2) Available at: https://unece.org/fileadmin/DAM/trans/danger/publi/ghs/ghs_rev04/English/ST-SG-AC10-30-Rev4e.pdf.