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Gaseous fire-extinguishing systems — Physical properties and system design —

Part 17: Halocarbon Blend 55

Systèmes d'extinction d'incendie utilisant des agents gazeux — Propriétés physiques et conception des systèmes —

Partie 17: Mélange d'hydrocarbures halogénés 55

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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).

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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 firefighting,* Subcommittee SC 8, *Gaseous media and firefighting systems using gas.*

A list of all parts in the ISO 14520 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.

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Introduction

The ISO 14520 series consists of the following parts, under the general title *Gaseous fire-extinguishing systems — Physical properties and system design*:

— Part 1: General requirements

— Part 2: Withdrawn

— Part 3: Withdrawn

— Part 4: Withdrawn

— Part 5: FK-5-1-12 extinguishant

— Part 6: Withdrawn

— Part 7: Withdrawn

— Part 8: HFC 125 extinguishant

— Part 9: HFC 227ea extinguishant

— Part 10: HFC 23 extinguishant

— Part 11: To be withdrawn

— Part 12: IG-01 extinguishant

— Part 13: IG-100 extinguishant

— Part 14: IG-55 extinguishant

— Part 15: IG-541 extinguishant

— Part 16: Withdrawn

— Part 17 (this document): Halocarbon Blend 55

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Gaseous fire-extinguishing systems — Physical properties and system design —

Part 17: Halocarbon Blend 55

1 Scope

This document provides specific requirements for gaseous fire-extinguishing systems with respect to the Halocarbon Blend 55 extinguishant. It includes details of physical properties, specification, usage and safety aspects. It also covers systems operating at nominal pressures of 25 bar, 35 bar and 42 bar, superpressurized with nitrogen. This document does not preclude the use of other systems.

NOTE 1 bar = 0,1 MPa = 10^5 Pa; 1 MPa = 1 N/mm^2.

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 14520-1:—[1)], *Gaseous fire-extinguishing systems — Physical properties and system design — Part 1: General requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14520-1 apply.

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

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

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

4 Characteristics and uses

4.1 General

Extinguishant Halocarbon Blend 55 shall comply with the specifications shown in Table 1.

Halocarbon Blend 55 [blend of 50 ± 3 % HFO-1233zd(E) and 50 ± 3 % FK-5-1-12 (by mass)] is a colourless, almost odourless, electrically non-conductive gas, with a density approximately 6,38 times that of air.

Its physical properties are shown in Table 2.

Halocarbon Blend 55 extinguishes fires mainly by physical means, but also by some chemical means.

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