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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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## 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](http://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](http://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](http://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](http://www.iso.org/members.html).

## 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



# 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<sup>2</sup>.

### 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:—<sup>1)</sup>, *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  $50 \pm 3$  % HFO-1233zd(E) and  $50 \pm 3$  % 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.

1) Under preparation. Stage at the time of publication ISO/DIS 14520-1:2022.