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

**Part 14:
IG-55 extinguishant**

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

Partie 14: Agent extincteur IG-55



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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 14520-14 was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 8, *Gaseous media and firefighting systems using gas*.

This second edition cancels and replaces the first edition (ISO 14520-14:2000), which has been technically revised.

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

- *Part 1: General requirements*
- *Part 2: CF₃I extinguishant*
- *Part 5: FK-5-1-12 extinguishant*
- *Part 6: HCFC Blend A extinguishant*
- *Part 8: HFC 125 extinguishant*
- *Part 9: HFC 227ea extinguishant*
- *Part 10: HFC 23 extinguishant*
- *Part 11: HFC 236fa extinguishant*
- *Part 12: IG-01 extinguishant*
- *Part 13: IG-100 extinguishant*
- *Part 14: IG-55 extinguishant*
- *Part 15: IG-541 extinguishant*

Parts 3, 4 and 7, which dealt with FC-2-1-8, FC-3-1-10 and HCFC 124 extinguishants, respectively, have been withdrawn, as these types are no longer manufactured.

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

Part 14:

IG-55 extinguishant

1 Scope

This part of ISO 14520 gives specific requirements for gaseous fire-extinguishing systems, with respect to the IG-55 extinguishant. It includes details of physical properties, specification, usage and safety aspects and is applicable to systems operating at nominal pressures of 150 bar, 200 bar and 300 bar, at 15 °C. This does not preclude the use of other systems, however, design data for other pressures were not available at time of publication.

2 Normative references

The following referenced documents are indispensable for the application 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.

4 Characteristics and uses

4.1 General

Extinguishant IG-55 shall comply with the specification according to Table 1.

IG-55 is a colourless, odourless, electrically non-conductive gas with a density approximately the same as that of air. It is an inert gas mixture consisting nominally of 50 % argon and 50 % nitrogen with the following mixture specification.

- a) Argon: range of (50 ± 5) %.
- b) Nitrogen: range of (50 ± 5) %.

The physical properties are given in Table 2.

IG-55 extinguishes fires by a reduction of the oxygen concentration in the atmosphere of the hazard enclosure.

1) To be published. (Revision of ISO 14520-1:2000)