

**TULEKAITSE. TULEKUSTUTUSAINED. HALOGEENITUD
SÜSIVESINIKUD. OSA 1: HALOON-1211 JA HALOON-
1301 SPETSIFIKATSIOONID**

**Fire protection - Fire extinguishing media -
Halogenated hydrocarbons - Part 1: Specifications for
halon 1211 and halon 1301 (ISO 7201-1:1989)**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 27201-1:2011 sisaldab Euroopa standardi EN 27201-1:1994 ingliskeelset teksti.	This Estonian standard EVS-EN 27201-1:2011 consists of the English text of the European standard EN 27201-1:1994.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.05.1994.	Date of Availability of the European standard is 26.05.1994.
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EUROPEAN STANDARD

EN 27201-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Descriptors: Fire protection, fire extinguishing installations, hydrocarbons, halohydrocarbons, specifications, safety, tests

English version

**Fire protection - Fire extinguishing media -
Halogenated hydrocarbons - Part 1 :
Specifications for halon 1211 and halon 1301
(ISO 7201-1:1989)**

Protection contre l'incendie - Agents
extincteurs - Hydrocarbures halogènes - Partie
1 : Spécifications pour les halons 1211 et 1301
(ISO 7201-1:1989)

Brandbekämpfung - Löschmittel Halogenierte
Kohlenwasserstoffe - Teil 1 : Spezifikationen
für Halon 1211 und Halon 1301 (ISO 7201-1:1989)

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Comité Européen de Normalisation
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Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Annex A (informative)

A-Deviations

A-Deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard does not fall under any Directive of the EC. In the relevant CEN/CENELEC countries these A-Deviations are valid instead of the provisions of the European Standard until they have been removed.

Clause	Deviation
	Sweden (SFS, Ordinance of CFCs, halons etc 1988:716) Note the following:
Section 6a	Hand-held fire extinguishers containing halons may not be manufactured, sold, recharged or imported on a professional basis.
Section 6b	The prohibitions in section 6a do not apply to fire extinguishing systems and hand-held fire extinguishers in: 1) aircraft and submarines; 2) combat vehicles belonging to the Defense Force; 3) action information centres belonging to the Defence Force on vessels and below ground.
Section 6c	Halons in existing fire extinguishing systems and hand-held fire extinguishers may not be released in full-scale tests or in other contexts, if the purpose is to prevent or counteract damage due to fire.

Introduction

This International Standard is one of a series giving specifications for fire extinguishing media in common use and which are in need of standardization for fire fighting purposes. These specifications are designed to establish that the medium in question has at least a minimum useful fire extinguishing capability and can therefore be reasonably sold for fire extinguishing purposes.

Requirements for media used in particular equipment will form the subject of future International Standards.

Fire protection — Fire extinguishing media — Halogenated hydrocarbons —

Part 1: Specifications for halon 1211 and halon 1301

1 Scope

This part of ISO 7201 specifies requirements for the following halogenated hydrocarbons for use as fire extinguishing media:

- a) halon 1211 [bromochlorodifluoromethane (CF_2ClBr)];
- b) halon 1301 [bromotrifluoromethane (CF_3Br)].

This part of ISO 7201 does not deal with the conditions of use of these products in fire fighting equipment. Such equipment (portable fire extinguishers, fixed installations, etc.) will be dealt with in future International Standards.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 7201. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7201 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3363 : 1976, *Fluorochlorinated hydrocarbons for industrial use — Determination of acidity — Titrimetric method*.

ISO 3427 : 1976, *Gaseous halogenated hydrocarbons (liquefied gases) — Taking of a sample*.

ISO 5789 : 1979, *Fluorinated hydrocarbons for industrial use — Determination of non-volatile residue*.

3 Definition

For the purpose of this part of ISO 7201, the following definition applies.

halon: A halogenated hydrocarbon used as a fire extinguishing medium.

NOTE — The following numbering system is used to identify halons. The word "halon" is followed by a number, usually of four digits, giving, in turn, the number of carbon, fluorine, chlorine and bromine atoms. Terminal zeros are omitted. Thus halon 1211 is bromochlorodifluorobromomethane (CF_2ClBr) and halon 1301 is bromotrifluoromethane (CF_3Br).

4 Requirements

Halons 1211 and 1301 shall comply with the requirements of table 1, when tested by the appropriate method of test specified in clause 6.

Table 1 — Requirements

Property	Requirements	
	Halon 1211	Halon 1301
Purity, % (mol/mol) min.	99,0	99,6
Acidity, ppm by mass, max.	3,0	3,0
Water content, ppm by mass, max.	20	10
Non-volatile residue, % (m/m) max.	0,01	0,01
Halogen ion	Passes test	Passes test
Suspended matter or sediment	None visible	None visible

5 Sampling

Samples of halons shall be taken from the manufacturer's shipping container using the method specified in ISO 3427.¹⁾

1) The sampling bottle should be capable of safely resisting the vapour pressure of the sample at the highest temperature that could be encountered.