

**NATIONAL STANDARD
OF CANADA**

CAN/ULC-S566:2017

**STANDARD FOR HALOCARBON CLEAN AGENT FIRE
EXTINGUISHERS**

Prepared and Published by:



Approved by:



Standards Council of Canada
Conseil canadien des normes

This is a preview. [Click here to purchase the full publication.](#)

Underwriters Laboratories of Canada (ULC) was established in 1920 by letters patent issued by the Canadian Government. It maintains and operates laboratories and certification services for the examination, testing and certification of appliances, equipment, materials, constructions and systems to determine their relation to life, fire and property hazards as well providing inspection services.

Underwriters Laboratories of Canada is accredited by the Standards Council of Canada as a Certification Organization, a Testing Organization, and an Inspection Body under the National Standards System of Canada.

ULC Standards develops and publishes standards and other related publications for building construction, security and burglar protection, environmental safety, electrical equipment, fire protection equipment, gas and oil equipment, thermal insulation products, materials and systems, energy use in the built environment and electrical utility safety.

ULC Standards is a not-for-profit organization and is accredited by the Standards Council of Canada as a Standards Development Organization.

National Standards of Canada developed by ULC Standards conform to the criteria and procedures established by the Standards Council of Canada. Such standards are prepared using the consensus principle by individuals who provide a balanced representation of interests relevant to the subject area on a national basis.

ULC is represented across Canada as well as many countries worldwide. For further information on ULC services, please contact:

Customer Service: 1-866-937-3852

National Standard of Canada

A National Standard of Canada is a standard developed by an SCC-accredited Standards Development Organization (SDO), and approved by the Standards Council of Canada (SCC), in accordance with SCC's: *Requirements and Guidance-Accreditation for Standards Development Organizations*, and *Requirements and Guidance-Approval of National Standards of Canada Designation*.

More information on National Standard requirements can be found at www.scc.ca. An SCC-approved standard reflects the consensus of a number of experts whose collective interests provide, to the greatest practicable extent, a balance of representation of affected stakeholders. National Standards of Canada are intended to make a significant and timely contribution to the Canadian interest.

SCC is a Crown corporation within the portfolio of Industry Canada. With the goal of enhancing Canada's economic competitiveness and social well-being, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts. Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

Users should always obtain the latest edition of a National Standard of Canada from the standards development organization responsible for its publication, as these documents are subject to periodic review.

CORPORATE HEADQUARTERS

Underwriters Laboratories of Canada
7 Underwriters Road
Toronto, Ontario M1R 3A9
Telephone: (416) 757-3611
Fax: (416) 757-9540

REGIONAL OFFICES

PACIFIC OFFICE

13775 Commerce Parkway, Suite 130
Richmond, British Columbia V6V 2V4
Telephone: (604) 214-9555
Fax: (604) 214-9550

EASTERN OFFICE

6505, Rte Transcanadienne, Suite 330
St-Laurent, Québec H4T 1S3
Telephone: (514) 363-5941
Fax: (514) 363-7014

For further information on ULC standards, please contact:

ULC STANDARDS

171 Nepean Street, Suite 400
Ottawa, Ontario K2P 0B4
Telephone: (613) 755-2729
Fax: (613) 231-5977
E-mail: customerservice@ulc.ca
Web site: www.ulc.ca

The intended primary application of this standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

Copies of this National Standard of Canada may be ordered from ULC Standards.

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

Prepared by:



**ULC Standards
CAN/ULC-S566
Second Edition**



**Underwriters Laboratories Inc.
ANSI/UL 2129
Third Edition**

Halocarbon Clean Agent Fire Extinguishers

January 5, 2017

Approved by:



ANSI/UL 2129-2017



**Standards Council of Canada
Conseil canadien des normes**

This is a preview. [Click here to purchase the full publication.](#)

Commitment for Amendments

This Standard is issued jointly by Underwriters Laboratories Inc. (UL) and ULC Standards. Amendments to this Standard will be made only after processing according to the Standards writing procedures by UL and ULC Standards.

UL and ULC Standards are separate and independent entities and each is solely responsible for its operations and business activities. The UL trade names and trademarks depicted in this document are the sole property of Underwriters Laboratories Inc. The ULC Standards trade names and trademarks depicted in this document are the sole property of ULC Standards.

ISSN 0317-526X Copyright © 2017 ULC Standards

All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, whatsoever without the prior permission of the publisher.

In Canada, written comments are to be sent to the ULC Standards, 400 - 171 Nepean Street, Ottawa, Ontario K2P 0B4. Proposals should be submitted on a Standards Revision Request Form available from ULC Standards.

Copyright © 2017 Underwriters Laboratories Inc.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

This ANSI/UL Standard for Safety consists of the Third Edition.

The most recent designation of ANSI/UL 2129 as an American National Standard (ANSI) occurred on January 5, 2017. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

To purchase UL Standards, visit Comm 2000 at <http://www.comm-2000.com/HowToOrder.aspx> or call toll-free 1-888-853-3503.

ULC Preamble

International Classification for Standards (ICS): 13.220.10

This Standard has been developed in compliance with the requirements of SCC for accreditation of a Standards Development Organization.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patents rights. ULC Standards shall not be held responsible for identifying any or all such patents rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

This Standard is intended to be used for conformity assessment.

The Second Edition of this ULC Standard was based on, and superseded, the First Edition.

The review and action to revise or reaffirm this Standard will not exceed 5 years from the date of publication, unless the Standard is identified as fitting within a stabilized category, whereby the review will commence within the appropriate time frame set out by ULC Standards.

TECHNICAL COMMITTEE ON PORTABLE FIRE EXTINGUISHERS

Name	Affiliation	Category	Region
L. Bourgeois	Tritop Inc	General Interest	Canada
J. Di Filippo	Kidde Canada	Producer	Canada
G. Faber	SCM Risk Management	General Interest	Canada
G. Ferris	Protection R.T Inc.	Producer	Canada
F. Goodnight	Fire Equipment Manufacturers' Association	Producer	USA
N. Khan	Techin (Technical Inspection Network)	General Interest	Canada
B. Levitt	Levitt-Safety Ltd.	User	Canada
N. Murray	Consumer Association of Canada	User	Canada
A. Rees	Department of National Defence	User	Canada
G. Schultz	City of Toronto	Regulator	Ontario
I. Shearer	Strike First Corporation	Producer	Canada
D. Tiller	Office of the Fire Marshal & Emergency Management (OFMEM)	Regulator	Ontario
G. Vestergom Jr.	Unifoam Company Ltd.	Producer	Canada
A. Kim	National Research Council of Canada	Associate Member (Non-Voting)	Canada
F. Leber	LRI Inc.	Associate Member (Non-Voting)	Canada
B. Shugarman	UL LLC	Associate Member (Non-Voting)	USA
M. Ramlochan	ULC Standards	Project Manager (Non-Voting)	Canada

This list represents the membership at the time the Committee balloted on the final text of this edition. Since that time, changes in the membership may have occurred.

CONTENTS

Preface	9
A INTRODUCTION	10
1 SCOPE	10
2 Units of Measurement	10
3 Reference Publications	10
4 Components	10
5 GLOSSARY	11
B CONSTRUCTION	12
6 General	12
7 Cylinders	13
8 Joints	14
9 Caps, Valves, Closures, and Pressure Relief	14
10 Gaskets and "O" Rings	15
11 Filling Density	15
12 Pressure Gauges and Indicators	15
13 Puncturing Mechanisms	16
14 Tamper Indicators and Locking Devices	16
15 Hose	17
16 Couplings	17
17 Nozzles and Discharge Valves	18
18 Siphon Tubes	18
19 Handles and Mounting Devices	18
20 Hose Retainers – Wheeled Extinguishers	19
21 Running Gear – Wheeled Extinguishers	19
22 Clean Agents	19
23 Expellant Gases	19
24 Gas Cartridges, Expellant Gas Cylinders, and Regulators	19
C PERFORMANCE	20
25 General	20
26 Fire Tests	20
27 Tamper Indicator and Locking Device Tests	20
28 Handle and Mounting Device Test	21
29 Operation Test	21
30 Discharge Duration Test	22
31 Rate of Flow Test	22
32 Intermittent Discharge Test	22
33 Operating Temperature Limits Test	23
34 Temperature Cycling Test	23
35 30-Day Elevated Temperature Test	23
36 High Temperature Exposure Test	23
37 Abnormal Operation Test	24
38 Pressure-Retention Test	24
39 Hydrostatic Pressure Test	24
40 Vibration Test	27
41 Roadability and Rough Usage Tests	28
42 Siphon Pull Test	30
43 Aging Tests – Polymeric Materials	30
44 Elastomeric Parts Test	32
45 Salt Spray Corrosion Test	33