JOINT CANADA-UNITED STATES
NATIONAL STANDARD

ANSI/CAN/UL 2901:2026

STANDARD FOR SAFETY

Antifreeze Solutions for Use in Fire Sprinkler Systems

ANSI/UL 2901-2026

SCC FOREWORD

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UL Standard for Safety for Antifreeze Solutions for Use in Fire Sprinkler Systems, ANSI/CAN/UL 2901

First Edition, Dated September 3, 2019

Summary of Topics

This revision of ANSI/CAN/UL 2901 dated May 5, 2026 includes revisions to impact of galvanic action test method: Section 14.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated November 21, 2025 and February 27, 2026.

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ANSI/CAN/UL 2901:2026

Standard for Antifreeze Solutions for Use in Fire Sprinkler Systems

First Edition

September 3, 2019

This ANSI/CAN/UL Safety Standard consists of the First Edition including revisions through May 5, 2026.

The most recent designation of ANSI/UL 2901 as an American National Standard (ANSI) occurred on May 5, 2026. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This Standard has been designated as a National Standard of Canada (NSC) on May 5, 2026.

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Preface

This is the First Edition of the ANSI/CAN/UL 2901, Standard for Safety for Antifreeze Solutions for Use in Fire Sprinkler Systems.

ULSE is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

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

This ANSI/CAN/UL 2901 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Annex A, identified as Informative, is for information purposes only.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

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

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This Edition of the Standard has been formally approved by the Technical Committee (TC) on Antifreeze Solutions for Use in Fire Sprinkler Systems, TC 2901.

This list represents the TC 2901 membership when the final text in this Standard was balloted. Since that time, changes in the membership may have occurred.

TC 2901 Membership

Name	Representing	Interest Category	Region
P. Berken	American Flow Control	Supply Chain	USA
D. Bonn	Travelers Insurance	General Interest	USA
C. Browning	National Fire Sprinkler Association	General Interest	USA
K. Bush	Office of the Maryland State Fire Marshal	Authorities Having Jurisdiction	USA
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M. O'Leary	Huguenot Labs	Producer	USA
S. Pearce	National Fire Equipment LTD.	Supply Chain	Ontario
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This Standard is intended to be used for conformity assessment.

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.

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INTRODUCTION

1 Scope

1.1 This standard covers requirements for the performance of antifreeze solutions for fire sprinkler systems.

1.2 These solutions are intended for use in wet pipe sprinkler systems subject to freezing for installation in accordance with the manufacturer's design and installation instructions, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, NFPA 13D, Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies, NFPA 13R, and the Standard for Installation of Automatic Sprinkler Systems, NFPA 13; and inspected, tested and maintained in accordance with the Standard for Inspection, Testing and Maintenance of Water Based Fire Protection Systems, NFPA 25.

1.3 This standard does not contain requirements to evaluate the risk associated with products of combustion of antifreeze solutions.

2 Units of measurement

2.1 The unit designated in each requirement shall be used as the official unit for purposes of that specific test in this standard. Where values of measurement are specified in both SI and English units, the unit in parenthesis is for information only.

3 Undated References

3.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

4 General

4.1 Antifreeze solutions shall be formulated in such a manner to demonstrate the ability of the solution to not substantially contribute to the heat release rate of a fire when tested in accordance with Section 18, Exposure to Fire.

4.2 For antifreeze solutions having hydraulic flow characteristics dissimilar from water, the manufacturer's design and installation instructions shall include information regarding the appropriate methodologies and criteria for hydraulically calculating sprinkler systems using the antifreeze solution. See Section 20, Viscosity at Temperature Limitations and 23.1(d).

4.3 Hydrocarbon oils shall not be miscible in an antifreeze solution unless it can be demonstrated that the miscibility will not significantly impact the ability of the solution to comply with the requirements of this standard.

4.4 Antifreeze solutions shall be pre-mixed at the factory and shall not require additional mixing in the field or additional constituents in the field.

4.5 The maximum use temperature shall not be less than 150 °F (66 °C).

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