# CAN/ULC 504:2025

# Standard for Dry Chemical Fire Extinguishers

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

Standard for Dry Chemical Fire Extinguishers, CAN/ULC 504

Fourth Edition, Dated December 18, 2024

***Summary of Topics***

***This revision of CAN/ULC 504 dated August 27, 2025 includes the revisions to Manual Section; 74.1, 74.2 (deleted), 74.3.***

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 revised requirements are substantially in accordance with Proposal(s) on this subject dated March 28, 2025.

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ULC Standards
Normes ULC

**ULC Standards**
**CAN/ULC 504:2025**
**Fourth Edition**

**ULSE Inc.**
**ANSI/UL 299**
**Twelfth Edition**

# Dry Chemical Fire Extinguishers

December 18, 2024

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Approved American National Standard
ANSI

**ANSI/UL 299-2025**

NATIONAL STANDARD OF CANADA
STANDARDS COUNCIL OF CANADA
CONSEIL CANADIEN DES NORMES
NORME NATIONALE DU CANADA

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**Commitment for Amendments**

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This ANSI/UL Standard for Safety consists of the Twelfth Edition including revisions through August 27, 2025.

The most recent designation of ANSI/UL 299 as an American National Standard (ANSI) occurred on August 27, 2025. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

The Department of Defense (DoD) has adopted UL 299 on August 6, 1990. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

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## ULC Preamble

International Classification for Standards (ICS): 13.220.10

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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.

The Fourth Edition National Standard of Canada was based on, and superseded, the Third Edition.

This CAN/ULC 504 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.

This Standard is intended to be used for conformity assessment.

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## Preface

This is the common ULSE and ULC Standard for Dry Chemical Fire Extinguishers. It is the Fourth edition of CAN/ULC 504, and the Twelfth edition of ANSI/UL 299.

This common Standard was prepared by ULSE Inc., ULC Standards and the Dry Chemical Fire Extinguisher Manufacturing Industry.

This Standard was formally approved by the ULC Committee on Portable Fire Extinguishers.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

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.

Annex A, identified as Normative, forms a mandatory part of this Standard.

NOTE: Although the intended primary application of this Standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

### Level of harmonization

This Standard used an ISO format, but is not based on, nor shall it be considered equivalent to, an ISO standard. This Standard is published as an identical standard.

An identical standard is a standard that is the same in technical content except for conflicts in Codes and Governmental Regulations. Presentation shall be word for word except for editorial changes.

### Interpretations

The interpretation by the standards development organization of an identical or equivalent standard shall be based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision shall be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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## INTRODUCTION

### 1 Scope

1.1 These requirements cover the construction and performance, exclusive of performance during fire tests, of portable dry chemical and dry powder (Class D) fire extinguishers. Dry chemical and dry powder fire extinguishers are intended to be utilized in accordance with the Standard for Portable Fire Extinguishers, NFPA 10 and with the National Fire Code of Canada.

1.2 The requirements for performance during fire testing of dry chemical fire extinguishers are specified in the Binational Standard for Rating and Fire Testing of Fire Extinguishers, UL 711/ULC-S508.

1.3 As used in these requirements, the term "extinguisher" refers to all extinguishers or any part thereof covered by these requirements, unless specifically noted otherwise.

### 2 Units of Measurement

2.1 The metric unit shall be designated as the official unit for purposes of this Standard. Where values of measurement are specified in both SI and English units, either unit is used. In cases of dispute, the metric unit shall be used.

### 3 Referenced Publications

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.

3.2 The following publications are referenced in this Standard:

ASTM A370, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*

ASTM B117, *Standard Practice for Operating Salt Spray (Fog) Testing Apparatus*

ASTM B209, *Standard Specifications for Aluminum and Aluminum-Alloy Sheet and Plate*

ASTM D638, *Standard Test Method for Tensile Properties*

ASTM D677, *Standard Test Methods for Dielectric Breakdown Voltage of Insulating Liquids Using Disk Electrodes*

ASTM D2565, *Standard Practice for Operating Xenon Arc-Type (Water-Cooled) Light Exposure Apparatus with and without Water for Exposure of Plastics*

CGA C-1, *Methods of Hydrostatic Testing of Compressed Gas Cylinders*

*National Fire Code of Canada*

NFPA 10, *Portable Fire Extinguishers*

UL 92, *Fire Extinguisher, Booster, and Noncollapsible Standpipe Hose and Hose Assemblies*

UL 94, *Tests for Flammability of Plastic Materials for Parts in Devices and Appliances*

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UL 157, *Gaskets and Seals*

UL/ULC 252, *Compressed Gas Regulators*

UL/ULC 404, *Gauges, Indicating Pressure, for Compressed Gas Service*

UL 711, *Rating and Fire Testing of Fire Extinguishers*

UL 1439, *Test for Sharpness of Edges on Equipment*

ULC 522, *Fire Extinguishers and Booster Hose*

ULC-S508, *Rating and Fire Testing of Fire Extinguishers*

## 4 Components

4.1 Except as indicated in 4.2, a component of a product covered by this Standard shall comply with the requirements for that component. A component shall comply with both the UL and ULC standards for the component.

4.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this Standard, or

b) Is superseded by a requirement in this Standard.

4.3 A component shall be used in accordance with its rating established for the intended conditions of use.

4.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

## 5 Glossary

5.1 For the purpose of this Standard, the following definitions apply.

5.2 DISPOSABLE (NONRECHARGEABLE) FIRE EXTINGUISHER – A fire extinguisher not capable of nor intended to undergo complete maintenance including internal inspection of cylinder, replacement of parts and seals and hydrostatic testing.

5.3 EFFECTIVE DISCHARGE – The time of discharge of extinguishing agent from the extinguisher until gas point.

5.4 EXPELLANT GAS – A compressed or pressurized gas used to propel the dry chemical extinguishing agent from a single cylinder.

5.5 GALVANIC COMPATIBILITY – Fire extinguisher cylinder and component parts which are not susceptible to 10-day stress corrosion cracking nor corrosion from combination of dissimilar materials.

5.6 GAS POINT – The point in time when the discharge changes from extinguishing agent to a gas and dry chemical combination.

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