UL 2182

STANDARD FOR SAFETY

Refrigerants

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UL Standard for Safety for Refrigerants, UL 2182

Second Edition, Dated April 21, 2006

Summary of Topics

This reaffirmation of ANSI/UL 2182 dated August 6, 2026 is issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

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 requirements are substantially in accordance with Proposal(s) on this subject dated June 19, 2026.

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UL 2182

Standard for Refrigerants

First Edition – December, 1994

Second Edition

April 21, 2006

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through August 6, 2026.

The most recent designation of ANSI/UL 2182 as a Reaffirmed American National Standard (ANS) occurred on August 6, 2026. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE 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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INTRODUCTION

1 Scope

1.1 This standard contains test procedures and methods to evaluate refrigerants and mark their containers according to the extent of the refrigerant's flammability with regard to their intended use as components of air-conditioning and refrigeration equipment.

1.2 *Deleted*

1.3 The refrigerants covered in this standard are shipped either as:

a) Liquids or gases in United States (US) Department Of Transportation (DOT) Code of Federal Regulations (CFR) Title 49 (or the equivalent specifications in a given country of origin) containers where applicable, or

b) Gases compressed to liquids in US DOT CFR Title 49 (or the equivalent specifications in a given country of origin) containers where applicable.

This standard does not contain requirements for the containers that hold the refrigerants.

1.4 The data developed by this standard is with respect to the risk of fire only.

1.5 This standard does not cover the physiological effects of the decomposition products of refrigerants, in any form, nor does it cover the efficiency or effectiveness of the refrigerants in their intended uses. This standard does not contain requirements to investigate the toxicity of the refrigerants.

1.6 This standard does not cover the evaluation of refrigerants with regard to hazard communication systems (e.g. Globally Harmonized System of Classification and Labeling of Chemicals or GHS).

2 General

2.1 Units of measurement

2.1.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.2 Undated references

2.2.1 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 Glossary

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

3.2 AMBIENT TEMPERATURE – 23.0 ±3.0°C (73.4 ±5.4°F).

3.3 AUTOIGNITION TEMPERATURE – The minimum temperature to which any part of a vapor-air mixture must be raised by application of heat to produce self-sustained (autogenous) combustion, as indicated by the appearance of flame or glow. The autoignition temperature of a liquid or gas is not a physical constant, and is affected by variables such as the size, shape, and degree of confinement of the

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