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ANSI Z21.74-2014

Portable refrigerators for use with HD-5 propane gas

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ANSI Z21.74-2014, Portable refrigerators for use with HD-5 propane gas

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ANSI Z21.74-2014
Portable refrigerators for use with
HD-5 propane gas



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Preface

This is the third edition of ANSI Z21.74 *Standard for Portable refrigerators for use with HD-5 propane gas*. It supersedes the previous editions published in 1992 and 1983. This Standard was prepared by the Z21/CSA Joint Technical Advisory Group on Standards Gas-Fired Refrigerators and Portable Camping Equipment, under the jurisdiction of the Z21/83 Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories and had been formally approved by the Technical Committee and the American National Standards Institute.

Interpretations: The Strategic Steering Committee on Standards for Gas Appliances and Related Accessories has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA’s procedures for interpretation shall be followed to determine the intended safety principle.”

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *This standard contains SI (Metric) corresponding to the yard/pound quantities, the purpose being to allow the standard to be used in SI (Metric) units. (Standard for use of the International System of Units (SI): The Modern Metric System, IEEE/ASTM SI 10 or ISO 80000-1:2009 Quantities and units — Part 1: General are used as a guide in making metric conversion from yard/pound quantities.) If a value for a measurement and a corresponding value in other units are stated, the first stated value is to be regarded as the requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding value in other units are both specified as a quoted marking requirement, the first stated unit, or both shall be provided.*
- 3) *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.*
- 4) *This publication was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity.” It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*
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 - d) *rationale for the change.*
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History of the development of ANSI Z21.74-2014

Note: *This history is informative and is not part of the standard.*

At its February 22–23, 1977 meeting, the Z21 refrigerator subcommittee agreed to draft a standard covering portable refrigerators for use with liquefied petroleum (LP) gases. An initial draft was reviewed at the August 23, 1979 and February 26–27, 1980 meetings, at which time it was concluded the continued development and supervision of the standard for portable refrigerators could be better addressed by the Z21 portable camping equipment subcommittee which supervises the standards for portable camping equipment for use with liquefied petroleum (LP) gases.

The American National Standards Committee Z21, at its April 9, 1980 meeting, concurring with a joint recommendation from these two sub-committees, directed its portable camping equipment subcommittee to continue the development of the draft standard for portable refrigerators with liaison representation from its refrigerator subcommittee.

The draft standard for portable refrigerators, was completed at a series of meetings by the camping equipment subcommittee and liaison representatives from the refrigerator subcommittee. The resultant draft was distributed for review and comment during December 1981.

Following reconsideration and modification of this draft standard in the light of comments received at its February 10, 1982 meeting, the camping equipment subcommittee recommended the standard to the Z21 Committee.

At its April 14, 1982 meeting, the Z21 Committee considered the draft standard and approved the draft standard for submittal to the American National Standards Institute, Inc.

During its September 21, 2911 meeting, the Z21 Committee proposed revisions and agreed to distribute for review and comment during December 2011. Following reconsideration of comments received the Z21 Committee approved the revisions to the Z21/83 Technical Committee for submittal to the American National Standards Institute, Inc.

Previous editions of the portable refrigerators for use with HD–5 propane gas standard, and addenda thereto, approved by the American National Standards Institute or its predecessor organizations are as follows:

Z21.74-1983	Z21.74a-1984 Z21.74b-1989
Z21.74-1992	Z21.74a-2010

ANSI Z21.74-2014

Portable refrigerators for use with HD-5 propane gas

1 Scope

1.1

This Standard covers gas-fired refrigerators, hereinafter referred to as refrigerators or appliances, having refrigerated spaces for:

- a) storage of foods; or
- b) storage of foods and making ice; or
- c) storage of frozen foods and making ice; or
- d) storage of foods and the storage of frozen foods and making ice.

This Standard applies to newly produced, unvented, portable refrigerators constructed entirely of new, unused parts and materials, with input ratings of 1000 Btu per hour (293 W) or less, and which are for use with HD-5 propane gas only. These refrigerators are intended for use both indoors in adequately ventilated structures and outdoors.

1.2

This Standard applies to refrigerators designed for self-contained fuel supplies and using fuel cylinders of not more than 75 cubic inches (1230 cm³) (2¹/₂ pounds nominal water capacity). Fuel supplies shall be in accordance with the *Standard for the Storage and Handling of Liquefied Petroleum Gases, NFPA No. 58*.

1.3

Refrigerators submitted for examination under this Standard shall use Group 2 refrigerants in quantities not exceeding 6 lb (2.7 kg). Group 2 refrigerants include, but are not limited to, the following:

Refrigerant	ANSI/ASHRAE 34 Designation
Ammonia (NH ₃)	717

Refrigerant systems shall comply with the applicable provisions of the *Standard Safety Code for Mechanical Refrigeration, ASHRAE 15*.

1.4

A refrigerator submitted for examination under this Standard shall be provided with a direct self-contained type of system employing the absorption or adsorption principle of refrigeration.

1.5

This Standard also covers all electrical equipment, wiring and accessories built in or supplied with refrigerators for use with low voltage direct current or alternating current. Appliances for use with alternating current shall be nominally rated 120 volts, 60 hertz.