ADDENDA

ANSI/ASHRAE Addendum ad to
ANSI/ASHRAE Standard 34-2022

Designation and Safety Classification of Refrigerants

Approved by ASHRAE Standards Committee on June 26, 2024, and by the American National Standards Institute on July 26, 2024.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

Addendum ad revises Table E-1 to use lethality (acute toxicity) value (50% of lethality ATEL) as the basis for the R-1270 anesthetic value.

Informative Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum ad to Standard 34-2022

Modify Table E-1 as follows. The remainder of Table E-1 remains unchanged.

(This appendix is not part of this standard. It is merely informative and does not contain requirements not necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

INFORMATIVE APPENDIX E
TOXICITY AND FLAMMABILITY DATA FOR SINGLE-COMPOUND REFRIGERANTS

Table E-1 Toxicity Table for Standard 34—ATEL, ODL, FCL, and RCL Values for Single-Compound Refrigerants[a] (ppm v/v)

		Cardiac Sensitization			Anesthesia										
Refrigerant R-[b]	Chemical Name	LC_{50}[b,c]	LOEL[d]	NOEL[d]	EC_{50}[e]	LOEL[f]	NOEL[g]	Other[h]	ATEL	ODL	FCL	RCL	LFL	ATEL Source	RCL Source
[. . .]															
1270	propene (propylene)	>490,000[s]	ND	ND	ND	~~ND~~ 69,000	~~10,000~~ ND	ND	1000	140,000	6700	1000	27,000	Sect 7.1.1 (b)	ATEL
[. . .]															

ND: None determined or not adequately defined according to criteria of this standard.
NA: Not applicable.

Informative Note: The data shown in this table are rounded to three significant digits to avoid suggestion of artificial precision, but actual calculations used the data as published or converted to avoid propagation of errors in calculations, especially for blends. The ATEL and RCL concentrations are rounded to two significant figures.

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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