



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

Public Review Draft

Proposed Addendum ad to Standard 34-2022, Designation and Safety Classification of Refrigerants

**First Public Review (April 2024)
(Draft shows Proposed Changes to Current Standard)**

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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

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

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strike through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

Addendum ad to Standard 34-2022

Modify Table E-1 as shown. 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)

Refrigerant R ^b	Chemical Name	Cardiac Sensitization			Anesthesia			Other ^h	ATEL	ODL	FCL	RCL	LFL	ATEL Source	RCL Source
		LC ₅₀ ^{b,c}	LOEL ^d	NOEL ^d	EC ₅₀ ^e	LOEL ^f	NOEL ^g								
[...]															
1270	propene (propylene)	>490,000 ^s	ND	ND	ND	ND 69,000	10,000 <u>ND</u>	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.

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.

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