



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

Public Review Draft

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

**First Public Review (June 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 updates Table 4-2 to add previously missing LFL and burning velocity values for several A2L refrigerants.

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 n to Standard 34-2022

Modify Table 4-2 as shown. Portions of Table 4-2 which are not shown herein remain unchanged.

Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number	RCL ^a			LFL ^j			BV ^p	Highly Toxic or Toxic ^f Under Code Classification
	(ppm v/v)	(lb/1000 ft ³)	(g/m ³)	(ppm v/v)	(lb/1000 ft ³)	(g/m ³)	(cm/s)	
				[...]				
457B	19,000	3.7	59	76,000	14.9	239	<u>4.9</u>	Neither
457C	13,800	3.4	54	55,000	13.6	215	<u>5.6</u>	
				[...]				
467A	31,000	6.7	110	<u>125,000^m</u>	<u>22.9^m</u>	<u>367^m</u>	<u><4</u>	Neither
468A	18,000	4.1	66	<u>73,000</u>	<u>16.9</u>	<u>270</u>	<u>2.1</u>	Neither
468B	18,000	4.4	70	<u>72,000</u>	<u>17.3</u>	<u>278</u>	<u>7.3^q</u>	Neither
468C	23,000	4.3	69	<u>92,000</u>	<u>17.2</u>	<u>276</u>	<u>7.6</u>	Neither
				[...]				
474A	13,000	3.3	53	53,000	13	209	<u>3.3</u>	Neither
				[...]				

Informative Note: Data values highlighted in gray in this table are based on conditions other than WCF @23°C (73.4°F). Refer to applicable table footnotes for details.

a. Data taken from Calm^{8,9,10}, Coombs^{11,12}, and Wilson and Richard¹³ (see Section 10).

[...]

f. *Highly toxic, toxic, or neither*, where *highly toxic* and *toxic* are as defined in the *International Fire Code, Uniform Fire Code*, and OSHA regulations, and *neither* identifies those refrigerants having less toxicity than either of those groups^{1,2,3}.

[...]

j. LFL is based on WCF @23°C (73.4°F) unless otherwise noted.

[...]

o. Reserved for future assignment

p. BV is based on WCF @23°C (73.4°F) unless otherwise noted.

q. WCF BV @23°C (73.4°F)