

**ERRATA SHEET FOR ANSI/ASHRAE STANDARD 34-2022  
Designation and Safety Classification of Refrigerants**

**May 10, 2024**

The corrections listed in this errata sheet apply to ANSI/ASHRAE Standard 34-2022. The first printing is identified on the outside back cover as “Product code: 86306 9/22”. Shaded items have been added since the previous published errata sheet date March 18, 2024 was distributed.

**Page   Erratum**

**37   9.5.2.1 Individual Compounds.** Revise Section 9.5.2.1e as shown below. Change is highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**9.5.2.1 Individual Compounds.** The following information shall be provided for single-compound refrigerants or for each component of blends:

[ ... ]

e. Normal boiling-point temperature at 14.7 psia (101.3 kPa~~101 kPa~~)

[ ... ]

**38   9.5.2.2 Azeotropic Blends.** Revise Sections 9.5.2.2e and 9.5.2.2f as shown below. Changes are highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**9.5.2.2 Azeotropic Blends. ...**

The following additional information shall be provided for azeotropes:

[ ... ]

e. Normal boiling-point temperature (bubble-point temperature) at 14.7 psia (101.3 kPa~~101 kPa~~) as formulated

f. Normal dew-point temperature at 14.7 psia (101.3 kPa~~101 kPa~~) as formulated.

[ ... ]

**38   9.5.2.3 Zeotropic Blends.** Revise Sections 9.5.2.3d and 9.5.2.3e as shown below. Changes are highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**9.5.2.3 Zeotropic Blends.** The following additional information shall be provided for zeotropes (including near azeotropes):

[ ... ]

d. Bubble-point temperature at 14.7 psia (101.3 kPa~~101 kPa~~)

e. Dew-point temperature at 14.7 psia (101.3 kPa~~101 kPa~~)

[ ... ]

- 46 B2.1.1 Experimental Verification.** Revise Sections B2.1.1 as shown below. Changes are highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**B2.1.1 Experimental Verification.** Experimental verification of the model shall take the form of leakage experiments (carried out in accordance with Section B2.4B2.3) that result in the WCFF. ...

[ ... ]

- 51 Table D-1, Refrigerant Data.** Revise the Relative Molar Mass values for rows 123, 152a, 170, 290 as shown below. Changes are highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**D-1, Refrigerant Data**

Refrigerant Number	Chemical Name <sup>a</sup>	Relative Molar Mass
[ ... ]		
123	2,2-dichloro-1,1,1-trifluoroethane	<u>152.9</u> <del>153.0</del>
[ ... ]		
152a	1,1-difluoroethane	<u>66.1</u> <del>66.0</del>
170	ethane	<u>30.1</u> <del>30.0</del>
[ ... ]		
290	propane	<u>44.1</u> <del>44.0</del>
[ ... ]		

**Page Erratum**

**54 Table D-2.** Change Average Relative Molar Mass for refrigerant number 402A from “101.6” to “101.5”.

**55 Table D-2.** Change Composition (mass %) for refrigerant number 421A from “R-125/134a (58.0/45.0)” to “R-125/134a (58.0/42.0)”.

**58 Table D-2.** Change Average Relative Molar Mass for refrigerant number 457C from “95.4” to “95.5”.

**59 Table D-2.** Change Azeotropic Relative Molar Mass for refrigerant number 502 from “112.0” to “111.6”.

**60 Table D-2, Data for Refrigerant Blends.** Revise the Normal Bubble Point (°F) value for row 510A as shown below. Changes are highlighted in yellow.

*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**Table D-2 Data for Refrigerant Blends**

Refrigerant Number	Composition (mass %) <sup>a</sup>	Normal Bubble Point	
		°C	°F
[ ... ]			
510A	R-E170/600a (88.0/12.0)	-25.2	<u>-13.4</u> <del>4 -13.4</del>
[ ... ]			

**60 Table D-2.** Change Azeotropic Relative Molar Mass for refrigerant number 515B from “117.9” to “117.5”.