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

June 28, 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 May 10, 2024 was distributed.

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Table 4-2. Revise LFL (g/m³) value for refrigerant number 429A from "83.8" to "52.1".

Table 4-2. Revise LFL (g/m³) value for refrigerant number 430A from "44.0" to "84.0".

Table 4-2. Revise LFL (g/m^3) value for refrigerant number 431A from "38.6" to "44.0".

Table 4-2. Revise LFL (g/m³) value for refrigerant number 433A from "32.4" to "35.7".

Table 4-2. Revise LFL (g/m³) value for refrigerant number 433C from "83.8" to "32.2".

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 <u>underline</u> and deletions are shown in <u>strikethrough</u>.)

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 (<u>101.3 kPa</u>101 kPa)

[...]

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:

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[...]

- e. Normal boiling-point temperature (bubble-point temperature) at 14.7 psia (101.3 kPa101 kPa) as formulated
- f. Normal dew-point temperature at 14.7 psia (101.3 kPa101 kPa) as formulated.

[...]

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 <u>underline</u> and deletions are shown in <u>strikethrough</u>.)

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 kPa101 kPa)
- e. Dew-point temperature at 14.7 psia (101.3 kPa101 kPa)

[...]

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 <u>B2.4B2.3</u>) that result in the WCFF. ...

[...]

Table D-2, Data for Refrigerant Blends. 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.*)

Table D-2 Data for Refrigerant Blends

Refrigerant Number	Chemical Name ^a	Relative Molar Mass
123	[] 2,2-dichloro-1,1,1- trifluoroethane	152.9 153.0

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	152a	1,1-difluoroeth	hane 66.1 66.0			
	170	ethane	30.1 30.0			
			[]			
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	290	propane	44.1 44.0			
<b>//////</b>	·····	······	^^^^^	^~~		
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- **Table D-2.** Change Average Relative Molar Mass for refrigerant number 402A from "101.6" to "101.5".
- **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)".
- **Table D-2.** Change Average Relative Molar Mass for refrigerant number 457C from "95.4" to "95.5".
- **Table D-2.** Change Azeotropic Relative Molar Mass for refrigerant number 502 from "112.0" to "111.6".
- **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

		Normal Bubble Point	
Refrigerant Number	Composition (mass %) ^a	•C	°F
	[]		
510A	R-E170/600a (88.0/12.0)	-25.2	<u>-13.4</u>
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**Table D-2.** Change Azeotropic Relative Molar Mass for refrigerant number 515B from "117.9" to "117.5".

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