

Errata Sheet for ANSI/ASHRAE Standard 34-2001, Designation and Classification of Refrigerants

March 30, 2004

The corrections listed in this errata sheet apply to ANSI/ASHRAE Standard 34-2001. The shaded erratum has been added since the previously published errata sheet dated February 7, 2002. *Note that the February 7, 2002 errata have been incorporated into the second printing of Standard 34-2001 identified as "86090 PC 5/02" on the outside back cover of the standard.*

Page Erratum

- 4 **Section 3 Definitions of Terms:** In the second column, end of 3rd paragraph; typographical error: Change note "4" to "Ref 4."
- 8 **Section 8.1.3 Timing:** In the third sentence of Section 8.1.3 change "(see 8.9.6)" to "(see 8.8.6)".
- 11 **Table 1 Refrigerant Data and Safety Classifications:** 245fa chemical formula, edit for consistency with Table 2 and IUPAC convention: Change $\text{CF}_3\text{CH}_2\text{CHF}_2$ to $\text{CHF}_2\text{CH}_2\text{CF}_3$
- 13 **Table 2 Data and Safety Classifications for Refrigerant Blends:** The following are typographical errors; a \pm symbol was printed instead of a + symbol; decimal precision that was specified was dropped in some case where composition or composition tolerances ended in ".0":
- For 402A composition, change (60/2/38) to (60.0/2.0/38.0)
 - For 402A composition tolerances, change ($\pm 2/\pm 0.1, -1/\pm 2$) to ($\pm 2.0/\pm 0.1, -1.0/\pm 2.0$)
 - For 402B composition, change (38/2/60) to (38.0/2.0/60.0)
 - For 402B composition tolerances, change ($\pm 2/\pm 0.1, -1/\pm 2$) to ($\pm 2.0/\pm 0.1, -1.0/\pm 2.0$)
 - For 413A composition tolerances, change ($\pm 1/\pm 2/\pm 0, -1$) to ($\pm 1/\pm 2/\pm 0, -1$)
 - For 414A composition tolerances, change ($\pm 2/\pm 2/\pm 0.5/\pm 0.5, -1$) to ($\pm 2.0/\pm 2.0/\pm 0.5/\pm 0.5, -1.0$)
 - For 414B composition tolerances, change ($\pm 2/\pm 2/\pm 0.5/\pm 0.5, -1$) to ($\pm 2.0/\pm 2.0/\pm 0.5/\pm 0.5, -1.0$)
 - For 416A composition tolerances, change (+0.5, -1/+1, -0.5/+0.1, -0.2) to (+0.5, -1.0/+1.0, -0.5/+0.1, -0.2)
 - For 417A composition tolerances, change ($\pm 1.1/\pm 1/\pm 0.1, -0.4$) to ($\pm 1.1/\pm 1.0/\pm 0.1, -0.4$)

The following is a typographical error; Capital letter "A" was printed instead of lower case "a" in R-134a.

- For 416A composition, change R-134A/124/600 (59.0/39.5/1.5) to R-134a/124/600 (59.0/39.5/1.5)

The following are misprints; minus signs and numerical values do not appear on the same line.

- 507A normal boiling point (°F) is -52.1
- 508B normal boiling point (°F) is -126.9

15 **Appendix B, Table B1; erroneous inclusion of material:**

- For 218, change 2001 Safety Group from A3 to A1 (see assigned safety classification in Table 1)
- For 245fa, change formula from $\text{CHF}_2\text{CH}_2\text{CH}_3$ to $\text{CHF}_2\text{CH}_2\text{CF}_3$. Change 2001 Safety Group from A3 to B1 (see assigned safety classification in Table 1)
- For C318, change chemical formula from C_4F_8 to $-(\text{CF}_2)_4-$ (see chemical formula in Table 1). Change 2001 Safety Group from A1 to – (see safety classification in Table 1)
- For 406A, change 2001 Safety Group from A1 to A2 (see assigned safety classification in Table 2)
- For 600a, change chemical formula from $\text{CH}(\text{CH}_3)_3$ to $\text{CH}(\text{CH}_3)_2\text{CH}_3$
- For 1140, change 2001 Safety Group from B3 to NC

Note: R-1140 was not safety classified in ASHRAE 34-1989. It was initially safety classified and listed in table 1 of ASHRE 34-1997, but removed later withdrawn from the standard with the publication of Addendum 34a.

16 **Appendix C, Table C; erroneous inclusion of material:**

For 34f description, delete the word “provisional.” The assignment of a safety classification of R-407E was not provisional.