ERRATA SHEET FOR ANSI/ASHRAE STANDARD 34-2019
Designation and Safety Classification of Refrigerants

April 15, 2022

The corrections listed in this errata sheet apply to ANSI/ASHRAE Standard 34-2019. The first printing is identified on the outside back cover as "Product code: 86015 5/19". Shaded items have been added since the previous published errata sheet date March 1, 2021 was distributed.

Page	Erratum
	B2.4.1 Leaks Under Storage/Shipping Conditions. In Section B2.4.1 change the equation in the third sentence, $T = T_b + 0.8(T_b - T_c)$, to $T = T_b + 0.8(T_c - T_b)$ as shown below. Changes are highlighted in yellow. *(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*
30	**B2.4.1 Leaks Under Storage/Shipping Conditions.** To simulate leaks under storage/shipping conditions, the container shall be filled with the WCF to 90%, by mass, of the maximum fill. The maximum fill for fluids having a critical temperature greater than 130°F (54.4°C) is the calculated mass that gives a 100% liquid fill at 130°F (54.4°C). The maximum fill for fluids whose critical temperature is lower than 130°F (54.4°C) is the calculated mass that gives 100% liquid fill at temperature $T = T_b + 0.8(T_c - T_b)$ ~~$T = T_b + 0.8(T_b - T_c)$~~, where T_b is the bubble-point temperature at atmospheric pressure (101.3 kPa) and T_c is the fluid critical temperature. The charged blend shall be vapor leaked, 2% by mass of the initial charge per hour, at the following temperatures: […]
43	**F2. Heat of Combustion for a Refrigerant Blend.** In Equation F-7 relocate the floating minus sign "-" so that it precedes "{[2(0.2311) + 3(0.7689)] [–393.51]" as shown in the corrected equation below.

$$
\begin{aligned}
&\Delta h_{combustion} = \\
&\sum \Delta h_f(\text{reactants}) - \sum \Delta h_f(\text{products}) = \\
&\{\Delta h_f(C_{2x+3y}H_{x+8y}F_{5x}) + (x+5y)\Delta h_f(O_2)\} \\
&-\{(2x+3y)\Delta h_f(CO_2) + (5x)\Delta h_f(HF) \\
&+ [(x+8y-5x)/2]\Delta h_f(H_2O)\} = \\
&-335.77 + [0.2311 + 5(0.7689)][O] \\
&-\{[2(0.2311) + 3(0.7689)][-393.51] \\
&+ [5(0.2311)][-273.30] \\
&+ [0.5]\,[0.2311 + 8(0.7689) \\
&- 5(0.2311)[-241.83]\} \\
&= 1701.6 \text{ kJ/mol}
\end{aligned}
\qquad \text{(F-7)}
$$