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will evaporate before a balance is reached. Consequently, at higher temperatures, more moisture is required to reach saturation. The amount of water vapor required for saturation at various temperatures is shown in **Table 17.1**

Table 17.1 Amount of Water Vapor Needed to Saturate 1 Kilogram of Dry Air at Various Temperatures

Temperature °C (°F)	Water-Vapor Content at Saturation (grams)
-40 (-40)	0.1
-30 (-22)	0.3
-20 (-4)	0.75
-10 (14)	2
0 (32)	3.5
5 (41)	5
10 (50)	7
15 (59)	10
20 (68)	14
25 (77)	20
30 (86)	26.5
35 (95)	35
40 (104)	47

Mixing Ratio

Not all air is saturated, of course. Thus, we need ways to express how