

DuPont™ Suva®
refrigerants

**Thermodynamic
Properties
of
HCFC-123**

(2,2 dichloro-1,1,1-trifluoroethane)

DuPont Product Names:

DuPont™ Suva® 123 Refrigerant

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The miracles of science™

Thermodynamic Properties of HCFC-123 Refrigerant (2,2 dichloro-1,1,1-trifluoroethane) Engineering (I/P) Units

New tables of the thermodynamic properties of HCFC-123 have been developed and are presented here. These tables are based on experimental data from the database at the National Institute of Standards and Technology (NIST). Equations have been developed, based on the Modified Benedict-Webb-Rubin (MBWR) equation of state, which represent the data with accuracy and consistency throughout the entire range of temperature, pressure, and density.

Physical Properties

Chemical Formula	CHCl ₂ CF ₃	
Molecular Weight	152.93	
Boiling Point at One Atmosphere	82.0°F	(27.85°C)
Critical Temperature	362.63°F 822.30°R	(183.68°C) (456.83 K)
Critical Pressure	532.0 psia	(3668.0 kPa [abs])
Critical Density	34.34 lb/ft ³	(550.0 kg/m ³)
Critical Volume	0.0291 ft ³ /lb	(0.00182 m ³ /kg)

Units and Factors

t = temperature in °F
 T = temperature in °R = °F + 459.67
 P = pressure in lb/in² absolute (psia)
 v_f = volume of saturated liquid in ft³/lb
 v_g = volume of saturated vapor in ft³/lb
 V = volume of superheated vapor in ft³/lb
 d_f = 1/v_f = density of saturated liquid in lb/ft³
 d_g = 1/v_g = density of saturated vapor in lb/ft³
 h_f = enthalpy of saturated liquid in Btu/lb
 h_{fg} = enthalpy of vaporization in Btu/lb
 h_g = enthalpy of saturated vapor in Btu/lb
 H = enthalpy of superheated vapor in Btu/lb
 s_f = entropy of saturated liquid in Btu/(lb) (°R)
 s_g = entropy of saturated vapor in Btu/(lb) (°R)
 S = entropy of superheated vapor in Btu/(lb) (°R)
 C_p = heat capacity at constant pressure in Btu/(lb) (°F)
 C_v = heat capacity at constant volume in Btu/(lb) (°F)
 v_s = velocity of sound in ft/sec

The gas constant, R = 10.732 (psia) (ft³)/(°R) (lb-mole)
 for HCFC-123, R = 0.0702 (psia) (ft³)/lb · °R

One atmosphere = 14.696 psia

Conversion factor from Work Units to Heat Units:

$$J = 0.185053$$

$$\text{Btu/lb} = [(\text{psia} \cdot \text{ft}^3)/\text{lb}] J$$

Reference point for enthalpy and entropy:

$$h_f = 0.0 \text{ Btu/lb at } -40^\circ\text{F}$$

$$s_f = 0.0 \text{ Btu/lb} \cdot ^\circ\text{R at } -40^\circ\text{F}$$

Equations

The Modified Benedict-Webb-Rubin (MBWR) equation of state was used to calculate the tables of thermodynamic properties. It was chosen as the preferred equation of state because it provided the most accurate fit of the thermodynamic data over the entire range of temperatures and pressures presented in these tables. The data fit and calculation of constants for HCFC-123 were performed for Du Pont at the National Institute of Standards and Technology (NIST) under the supervision of Dr. Mark O. McLinden.

The constants were calculated in SI units. For conversion of thermodynamic properties to Engineering (I/P) units, properties must be calculated in SI units and converted to I/P units. Conversion factors are provided for each property derived from the MBWR equation of state.

1. Equation of State (MBWR)

$$P = \sum_{n=1}^9 a_n/V^n + \exp(-V_c^2/V^2) \sum_{n=10}^{15} a_n/V^{2n-17}$$

where the temperature dependence of the coefficients is given by:

$$a_1 = RT$$

$$a_2 = b_1T + b_2T^{0.5} + b_3 + b_4/T + b_5/T^2$$

$$a_3 = b_6T + b_7 + b_8/T + b_9/T^2$$

$$a_4 = b_{10}T + b_{11} + b_{12}/T$$

$$a_5 = b_{13}$$

$$a_6 = b_{14}/T + b_{15}/T^2$$

$$a_7 = b_{16}/T$$

$$a_8 = b_{17}/T + b_{18}/T^2$$

$$a_9 = b_{19}/T^2$$

$$a_{10} = b_{20}/T^2 + b_{21}/T^3$$

$$a_{11} = b_{22}/T^2 + b_{23}/T^4$$

$$a_{12} = b_{24}/T^2 + b_{25}/T^3$$

$$a_{13} = b_{26}/T^2 + b_{27}/T^4$$

$$a_{14} = b_{28}/T^2 + b_{29}/T^3$$

$$a_{15} = b_{30}/T^2 + b_{31}/T^3 + b_{32}/T^4$$

where T is in K = °C + 273.15, P is in kPa, V is in m³/mole, and R = 8.314471 J/(mole) (K)

MBWR coefficients for HCFC-123:

$b_1 = -1.973\ 717\ 9010\ E+00$
 $b_2 = 1.435\ 122\ 7567\ E+02$
 $b_3 = -2.970\ 987\ 6039\ E+03$
 $b_4 = 4.505\ 786\ 7093\ E+05$
 $b_5 = -4.047\ 216\ 7920\ E+07$
 $b_6 = 1.019\ 193\ 5793\ E-01$
 $b_7 = -1.963\ 375\ 2269\ E+02$
 $b_8 = 9.251\ 220\ 6444\ E+04$
 $b_9 = -4.007\ 630\ 1858\ E+07$
 $b_{10} = -2.040\ 473\ 0428\ E-02$
 $b_{11} = 3.681\ 964\ 8916\ E+01$
 $b_{12} = -1.144\ 525\ 2703\ E+04$
 $b_{13} = -5.509\ 682\ 7243\ E-01$
 $b_{14} = -7.762\ 295\ 1034\ E+00$
 $b_{15} = 1.217\ 213\ 0502\ E+05$
 $b_{16} = -8.286\ 917\ 1955\ E+00$
 $b_{17} = 7.261\ 925\ 3573\ E-01$
 $b_{18} = -1.436\ 309\ 9944\ E+03$
 $b_{19} = 6.425\ 273\ 9335\ E+01$
 $b_{20} = 3.352\ 484\ 9016\ E+07$
 $b_{21} = -2.068\ 382\ 1999\ E+09$
 $b_{22} = 1.825\ 650\ 3429\ E+06$
 $b_{23} = 4.239\ 144\ 7763\ E+10$
 $b_{24} = 2.603\ 669\ 5332\ E+04$
 $b_{25} = 1.307\ 500\ 3968\ E+07$
 $b_{26} = 1.156\ 889\ 5787\ E+03$
 $b_{27} = -7.417\ 765\ 4079\ E+06$
 $b_{28} = -2.449\ 500\ 4199\ E+00$
 $b_{29} = 4.961\ 207\ 9844\ E+03$
 $b_{30} = 4.045\ 163\ 1009\ E-03$
 $b_{31} = 1.214\ 915\ 4232\ E+02$
 $b_{32} = -2.262\ 478\ 6818\ E+04$

Ideal Gas Heat Capacity Equation (at constant pressure):

$$C_p^\circ (\text{J/mole} \cdot \text{K}) = cp1 + cp2 T + cp3 T^2$$

$cp1 = 2.89811\ E+01$ $cp3 = -1.95477\ E-01$
 $cp2 = 3.04711\ E-01$ $R = 8.314471\ \text{J/mole} \cdot \text{K}$
 $MW = 152.93$

Properties calculated in SI units from the equation and constants listed above can be converted to I/P units using the conversion factors shown below. Please note that in converting enthalpy and entropy from SI to I/P units, a change in reference states must be included (from $H = 200$ and $S = 1$ at 0°C for SI units to $H = 0$ and $S = 0$ at -40°C for I/P units). In the conversion equation below, $H(\text{ref})$ and $S(\text{ref})$ are the saturated liquid enthalpy and entropy at -40°C . For HCFC-123, $H(\text{ref}) = 167.2\ \text{kJ/kg}$ and $S(\text{ref}) = 0.8705\ \text{kJ/kg} \cdot \text{K}$.

$$\begin{aligned}
P (\text{psia}) &= P (\text{kPa}) \cdot 0.14504 \\
T (^\circ\text{F}) &= (T [^\circ\text{C}] \cdot 1.8) + 32 \\
D (\text{lb/ft}^3) &= D (\text{kg/m}^3) \cdot 0.062428 \\
V (\text{ft}^3/\text{lb}) &= V (\text{m}^3/\text{kg}) \cdot 16.018 \\
H (\text{Btu/lb}) &= [H (\text{kJ/kg}) - H(\text{ref})] \cdot 0.43021 \\
S (\text{Btu/lb} \cdot ^\circ\text{R}) &= [S (\text{kJ/kg} \cdot \text{K}) - S(\text{ref})] \cdot 0.23901 \\
C_p (\text{Btu/lb} \cdot ^\circ\text{F}) &= C_p (\text{kJ/kg} \cdot \text{K}) \cdot 0.23901 \\
C_v (\text{Btu/lb} \cdot ^\circ\text{F}) &= C_v (\text{kJ/kg} \cdot \text{K}) \cdot 0.23901 \\
v_s (\text{ft/sec}) &= v_s (\text{m/sec}) \cdot 3.2808
\end{aligned}$$

2. Martin-Hou Equation of State (fit from MBWR data)

As previously stated, the thermodynamic properties presented in these tables are based on the MBWR equation of state. Coefficients for the Martin-Hou equation of state are presented below for the convenience of those who may have existing computer programs based on this equation of state. While not as accurate as the data from the MBWR equation of state, particularly in the superheated region, data calculated using these Martin-Hou coefficients should be sufficient for most engineering calculations.

$$P = RT/(V-b) + \sum_{i=2}^5 (A_i + B_i T + C_i \exp(-kT/T_c))/(V-b)^i$$

For SI units

T and T_c are in $\text{K} = ^\circ\text{C} + 273.15$, V is in m^3/kg , and P is in kPa

$$R = 0.0544\ \text{kJ/kg} \cdot \text{K}$$

b, A_i, B_i, C_i, k are constants:

$$\begin{aligned}
A_2 &= -1.770068\ E-01 & A_4 &= -9.077682\ E-07 \\
B_2 &= 2.384783\ E-04 & B_4 &= 1.955524\ E-09 \\
C_2 &= -1.145981\ E+03 & C_4 &= -6.012000\ E-01 \\
A_3 &= 5.579420\ E-04 & A_5 &= 4.174049\ E-10 \\
B_3 &= -1.030148\ E-06 & B_5 &= -1.035972\ E-12 \\
C_3 &= -4.535924\ E+00 & C_5 &= 1.110889\ E-03 \\
b &= 4.628100\ E-04 & k &= 1.750000\ E+01
\end{aligned}$$

For I/P units

T and T_c are in $^{\circ}\text{R} = ^{\circ}\text{F} + 459.67$, V is in ft^3/lb , and P is in psia

$$R = 0.0702 \text{ (psia)(ft}^3\text{)/lb} \cdot ^{\circ}\text{R}$$

b, A_i , B_i , C_i , k are constants:

$$A_2 = -6.587394 \text{ E}+00 \quad A_4 = -8.668417 \text{ E}-03$$

$$B_2 = 4.930603 \text{ E}-03 \quad B_4 = 1.037422 \text{ E}-05$$

$$C_2 = -4.264823 \text{ E}+04 \quad C_4 = -5.740950 \text{ E}+03$$

$$A_3 = 3.326085 \text{ E}-01 \quad A_5 = 6.384736 \text{ E}-05$$

$$B_3 = -3.411704 \text{ E}-04 \quad B_5 = -8.803615 \text{ E}-08$$

$$C_3 = -2.704021 \text{ E}+03 \quad C_5 = 1.699245 \text{ E}+02$$

$$b = 7.431500 \text{ E}-03 \quad k = 1.750000 \text{ E}+01$$

Ideal Gas Heat Capacity (at constant vapor):

$$C_v^{\circ} = a + bT + cT^2 + dT^3 + f/T^2$$

For SI units

$$C_v^{\circ} = \text{kJ/kg} \cdot \text{K}$$

T is in $\text{K} = ^{\circ}\text{C} + 273.15$

a, b, c, d, f are constants:

$$a = -5.397695 \text{ E}+00 \quad d = 4.340077 \text{ E}-08$$

$$b = 3.275570 \text{ E}-02 \quad f = 6.622145 \text{ E}+04$$

$$c = -6.358090 \text{ E}-05$$

For I/P units

$$C_v^{\circ} = \text{Btu/lb} \cdot ^{\circ}\text{R}$$

T is in $^{\circ}\text{R} = ^{\circ}\text{F} + 459.67$

a, b, c, d, f are constants:

$$a = -1.290080 \text{ E}+00 \quad d = 1.778641 \text{ E}-09$$

$$b = 4.349333 \text{ E}-03 \quad f = 5.128047 \text{ E}+04$$

$$c = -4.690185 \text{ E}-06$$

3. Vapor Pressure

$$\log_{10} P_{\text{sat}} = A + B/T + C \log_{10} T + D T + E \left(\frac{F-T}{T} \right) \log_{10} (F-T)$$

For SI units

T is in $\text{K} = ^{\circ}\text{C} + 273.15$ and P is in kPa

A, B, C, D, E, F are constants:

$$A = 1.656333 \text{ E}+03 \quad D = -8.868380 \text{ E}-02$$

$$B = -2.480583 \text{ E}+06 \quad E = 4.617861 \text{ E}+02$$

$$C = 1.792522 \text{ E}+01 \quad F = 1.666667 \text{ E}+03$$

For I/P units

T is in $^{\circ}\text{R} = ^{\circ}\text{F} + 459.67$ and P is in psia

A, B, C, D, E, F are constants:

$$A = 1.768800 \text{ E}+03 \quad D = -4.926878 \text{ E}-02$$

$$B = -4.818693 \text{ E}+06 \quad E = 4.617861 \text{ E}+02$$

$$C = 1.792522 \text{ E}+01 \quad F = 3.000000 \text{ E}+03$$

4. Density of the Saturated Liquid

$$d_f = A_f + B_f (1-T_r)^{(1/3)} + C_f (1-T_r)^{(2/3)} + D_f (1-T_r) + E_f (1-T_r)^{(4/3)}$$

For SI units

$T_r = T/T_c$, both in $\text{K} = ^{\circ}\text{C} + 273.15$ and d_f is in kg/m^3

A_f , B_f , C_f , D_f , E_f are constants:

$$A_f = 4.643358 \text{ E}+02 \quad D_f = 1.986142 \text{ E}+03$$

$$B_f = 1.625985 \text{ E}+03 \quad E_f = -7.172430 \text{ E}+02$$

$$C_f = -1.333543 \text{ E}+03$$

For I/P units

$T_r = T/T_c$, both in $^{\circ}\text{R} = ^{\circ}\text{F} + 459.67$ and d_f is in lb/ft^3

A_f , B_f , C_f , D_f , E_f are constants:

$$A_f = 2.898754 \text{ E}+01 \quad D_f = 1.239908 \text{ E}+02$$

$$B_f = 1.015069 \text{ E}+01 \quad E_f = -4.477602 \text{ E}+01$$

$$C_f = -8.325036 \text{ E}+01$$

**Table 1
HCFC-123 Saturation Properties—Temperature Table**

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
-150	0.001	0.0092	—	108.8	0.000	-101.9	169.2	67.3	-0.3012	0.2451	-150
-149	0.001	0.0092	—	108.8	0.000	-98.8	166.2	67.4	-0.2912	0.2438	-149
-148	0.001	0.0092	—	108.7	0.000	-95.8	163.3	67.5	-0.2815	0.2424	-148
-147	0.001	0.0092	—	108.6	0.000	-92.8	160.5	67.6	-0.2722	0.2411	-147
-146	0.001	0.0092	—	108.5	0.000	-90.0	157.8	67.8	-0.2631	0.2399	-146
-145	0.001	0.0092	—	108.5	0.000	-87.3	155.2	67.9	-0.2544	0.2387	-145
-144	0.001	0.0092	10000.0000	108.4	0.000	-84.6	152.6	68.0	-0.2459	0.2375	-144
-143	0.001	0.0092	10000.0000	108.3	0.000	-82.0	150.2	68.1	-0.2378	0.2364	-143
-142	0.001	0.0092	10000.0000	108.2	0.000	-79.5	147.8	68.2	-0.2299	0.2353	-142
-141	0.002	0.0092	10000.0000	108.2	0.000	-77.1	145.5	68.4	-0.2223	0.2342	-141
-140	0.002	0.0093	10000.0000	108.1	0.000	-74.8	143.2	68.5	-0.2149	0.2332	-140
-139	0.002	0.0093	10000.0000	108.0	0.000	-72.5	141.1	68.6	-0.2078	0.2322	-139
-138	0.002	0.0093	10000.0000	107.9	0.000	-70.3	139.0	68.7	-0.2010	0.2312	-138
-137	0.002	0.0093	10000.0000	107.9	0.000	-68.1	137.0	68.8	-0.1943	0.2302	-137
-136	0.003	0.0093	10000.0000	107.8	0.000	-66.1	135.0	69.0	-0.1879	0.2293	-136
-135	0.003	0.0093	10000.0000	107.7	0.000	-64.1	133.2	69.1	-0.1817	0.2284	-135
-134	0.003	0.0093	10000.0000	107.6	0.000	-62.1	131.3	69.2	-0.1758	0.2275	-134
-133	0.004	0.0093	5000.0000	107.6	0.000	-60.2	129.6	69.3	-0.1700	0.2267	-133
-132	0.004	0.0093	5000.0000	107.5	0.000	-58.4	127.9	69.5	-0.1644	0.2258	-132
-131	0.004	0.0093	5000.0000	107.4	0.000	-56.6	126.2	69.6	-0.1590	0.2250	-131
-130	0.005	0.0093	5000.0000	107.3	0.000	-54.9	124.6	69.7	-0.1538	0.2242	-130
-129	0.005	0.0093	5000.0000	107.3	0.000	-53.3	123.1	69.8	-0.1487	0.2235	-129
-128	0.006	0.0093	5000.0000	107.2	0.000	-51.6	121.6	69.9	-0.1438	0.2227	-128
-127	0.006	0.0093	3333.3333	107.1	0.000	-50.1	120.1	70.1	-0.1391	0.2220	-127
-126	0.007	0.0093	3333.3333	107.0	0.000	-48.6	118.7	70.2	-0.1346	0.2213	-126
-125	0.007	0.0093	3333.3333	107.0	0.000	-47.1	117.4	70.3	-0.1302	0.2206	-125
-124	0.008	0.0094	3333.3333	106.9	0.000	-45.7	116.1	70.4	-0.1259	0.2199	-124
-123	0.009	0.0094	2500.0000	106.8	0.000	-44.3	114.8	70.6	-0.1218	0.2193	-123
-122	0.009	0.0094	2500.0000	106.7	0.000	-42.9	113.6	70.7	-0.1178	0.2186	-122
-121	0.010	0.0094	2500.0000	106.7	0.000	-41.6	112.4	70.8	-0.1140	0.2180	-121
-120	0.011	0.0094	2500.0000	106.6	0.000	-40.4	111.3	70.9	-0.1102	0.2174	-120
-119	0.012	0.0094	2000.0000	106.5	0.001	-39.1	110.2	71.0	-0.1066	0.2168	-119
-118	0.012	0.0094	2000.0000	106.5	0.001	-38.0	109.1	71.2	-0.1032	0.2162	-118
-117	0.013	0.0094	1666.6667	106.4	0.001	-36.8	108.1	71.3	-0.0998	0.2157	-117
-116	0.014	0.0094	1666.6667	106.3	0.001	-35.7	107.1	71.4	-0.0965	0.2151	-116
-115	0.015	0.0094	1666.6667	106.2	0.001	-34.6	106.1	71.5	-0.0934	0.2146	-115
-114	0.016	0.0094	1428.5714	106.2	0.001	-33.5	105.2	71.7	-0.0903	0.2140	-114
-113	0.017	0.0094	1428.5714	106.1	0.001	-32.5	104.3	71.8	-0.0874	0.2135	-113
-112	0.019	0.0094	1250.0000	106.0	0.001	-31.5	103.5	71.9	-0.0845	0.2130	-112
-111	0.020	0.0094	1250.0000	105.9	0.001	-30.6	102.6	72.0	-0.0818	0.2125	-111
-110	0.021	0.0094	1111.1111	105.9	0.001	-29.6	101.8	72.2	-0.0791	0.2121	-110
-109	0.023	0.0095	1111.1111	105.8	0.001	-28.7	101.0	72.3	-0.0765	0.2116	-109
-108	0.024	0.0095	1000.0000	105.7	0.001	-27.9	100.3	72.4	-0.0740	0.2111	-108
-107	0.026	0.0095	1000.0000	105.6	0.001	-27.0	99.5	72.5	-0.0716	0.2107	-107
-106	0.027	0.0095	909.0909	105.6	0.001	-26.2	98.8	72.7	-0.0692	0.2102	-106
-105	0.029	0.0095	833.3333	105.5	0.001	-25.4	98.2	72.8	-0.0670	0.2098	-105
-104	0.031	0.0095	833.3333	105.4	0.001	-24.6	97.5	72.9	-0.0648	0.2094	-104
-103	0.033	0.0095	769.2308	105.3	0.001	-23.8	96.9	73.0	-0.0626	0.2090	-103
-102	0.035	0.0095	714.2857	105.3	0.001	-23.1	96.3	73.2	-0.0606	0.2086	-102
-101	0.037	0.0095	666.6667	105.2	0.002	-22.4	95.7	73.3	-0.0586	0.2082	-101
-100	0.039	0.0095	666.6667	105.1	0.002	-21.7	95.1	73.4	-0.0567	0.2078	-100
-99	0.041	0.0095	625.0000	105.1	0.002	-21.0	94.6	73.6	-0.0548	0.2074	-99
-98	0.043	0.0095	588.2353	105.0	0.002	-20.4	94.0	73.7	-0.0530	0.2071	-98
-97	0.046	0.0095	555.5556	104.9	0.002	-19.7	93.5	73.8	-0.0512	0.2067	-97
-96	0.049	0.0095	526.3158	104.8	0.002	-19.1	93.0	73.9	-0.0495	0.2063	-96
-95	0.051	0.0095	500.0000	104.8	0.002	-18.5	92.6	74.1	-0.0478	0.2060	-95
-94	0.054	0.0096	476.1905	104.7	0.002	-17.9	92.1	74.2	-0.0462	0.2056	-94
-93	0.057	0.0096	454.5455	104.6	0.002	-17.3	91.7	74.3	-0.0447	0.2053	-93
-92	0.060	0.0096	434.7826	104.5	0.002	-16.8	91.2	74.5	-0.0431	0.2050	-92
-91	0.063	0.0096	416.6667	104.5	0.002	-16.2	90.8	74.6	-0.0417	0.2047	-91

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID V _f	VAPOR V _g	LIQUID 1/V _f	VAPOR 1/V _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID S _f	VAPOR S _g	
-90	0.067	0.0096	384.6154	104.4	0.003	-15.7	90.4	74.7	-0.0403	0.2043	-90
-89	0.070	0.0096	370.3704	104.3	0.003	-15.2	90.0	74.8	-0.0389	0.2040	-89
-88	0.074	0.0096	357.1429	104.2	0.003	-14.7	89.7	75.0	-0.0375	0.2037	-88
-87	0.077	0.0096	333.3333	104.2	0.003	-14.2	89.3	75.1	-0.0362	0.2034	-87
-86	0.081	0.0096	322.5806	104.1	0.003	-13.7	89.0	75.2	-0.0350	0.2031	-86
-85	0.085	0.0096	312.5000	104.0	0.003	-13.3	88.6	75.4	-0.0337	0.2028	-85
-84	0.090	0.0096	294.1176	104.0	0.003	-12.8	88.3	75.5	-0.0325	0.2026	-84
-83	0.094	0.0096	277.7778	103.9	0.004	-12.4	88.0	75.6	-0.0314	0.2023	-83
-82	0.099	0.0096	270.2703	103.8	0.004	-12.0	87.7	75.7	-0.0302	0.2020	-82
-81	0.103	0.0096	256.4103	103.7	0.004	-11.5	87.4	75.9	-0.0291	0.2017	-81
-80	0.108	0.0096	243.9024	103.7	0.004	-11.1	87.1	76.0	-0.0280	0.2015	-80
-79	0.113	0.0097	232.5581	103.6	0.004	-10.7	86.9	76.1	-0.0270	0.2012	-79
-78	0.119	0.0097	227.2727	103.5	0.004	-10.4	86.6	76.3	-0.0260	0.2010	-78
-77	0.124	0.0097	217.3913	103.4	0.005	-10.0	86.4	76.4	-0.0250	0.2007	-77
-76	0.130	0.0097	208.3333	103.4	0.005	-9.6	86.1	76.5	-0.0240	0.2005	-76
-75	0.136	0.0097	200.0000	103.3	0.005	-9.2	85.9	76.7	-0.0231	0.2002	-75
-74	0.142	0.0097	188.6792	103.2	0.005	-8.9	85.7	76.8	-0.0222	0.2000	-74
-73	0.149	0.0097	181.8182	103.1	0.006	-8.5	85.5	76.9	-0.0213	0.1998	-73
-72	0.155	0.0097	175.4386	103.1	0.006	-8.2	85.3	77.1	-0.0204	0.1995	-72
-71	0.162	0.0097	166.6667	103.0	0.006	-7.9	85.1	77.2	-0.0195	0.1993	-71
-70	0.169	0.0097	161.2903	102.9	0.006	-7.6	84.9	77.3	-0.0187	0.1991	-70
-69	0.177	0.0097	153.8462	102.8	0.007	-7.2	84.7	77.4	-0.0179	0.1989	-69
-68	0.185	0.0097	149.2537	102.8	0.007	-6.9	84.5	77.6	-0.0171	0.1986	-68
-67	0.193	0.0097	142.8571	102.7	0.007	-6.6	84.3	77.7	-0.0163	0.1984	-67
-66	0.201	0.0097	136.9863	102.6	0.007	-6.3	84.2	77.8	-0.0156	0.1982	-66
-65	0.209	0.0098	131.5789	102.6	0.008	-6.0	84.0	78.0	-0.0148	0.1980	-65
-64	0.218	0.0098	126.5823	102.5	0.008	-5.7	83.8	78.1	-0.0141	0.1978	-64
-63	0.227	0.0098	121.9512	102.4	0.008	-5.5	83.7	78.2	-0.0134	0.1976	-63
-62	0.237	0.0098	117.6471	102.3	0.009	-5.2	83.6	78.4	-0.0127	0.1974	-62
-61	0.247	0.0098	113.6364	102.3	0.009	-4.9	83.4	78.5	-0.0120	0.1972	-61
-60	0.257	0.0098	108.6957	102.2	0.009	-4.6	83.3	78.6	-0.0113	0.1970	-60
-59	0.267	0.0098	105.2632	102.1	0.010	-4.4	83.2	78.8	-0.0107	0.1969	-59
-58	0.278	0.0098	101.0101	102.0	0.010	-4.1	83.0	78.9	-0.0100	0.1967	-58
-57	0.290	0.0098	97.0874	102.0	0.010	-3.9	82.9	79.0	-0.0094	0.1965	-57
-56	0.301	0.0098	93.4579	101.9	0.011	-3.6	82.8	79.2	-0.0088	0.1963	-56
-55	0.313	0.0098	90.0901	101.8	0.011	-3.4	82.7	79.3	-0.0082	0.1961	-55
-54	0.326	0.0098	86.9565	101.7	0.012	-3.1	82.6	79.4	-0.0076	0.1960	-54
-53	0.339	0.0098	84.0336	101.7	0.012	-2.9	82.5	79.6	-0.0070	0.1958	-53
-52	0.352	0.0098	81.3008	101.6	0.012	-2.6	82.4	79.7	-0.0064	0.1956	-52
-51	0.365	0.0099	78.1250	101.5	0.013	-2.4	82.3	79.8	-0.0058	0.1955	-51
-50	0.380	0.0099	75.1880	101.5	0.013	-2.2	82.2	80.0	-0.0052	0.1953	-50
-49	0.394	0.0099	72.9927	101.4	0.014	-1.9	82.1	80.1	-0.0047	0.1951	-49
-48	0.409	0.0099	70.4225	101.3	0.014	-1.7	82.0	80.3	-0.0041	0.1950	-48
-47	0.425	0.0099	68.0272	101.2	0.015	-1.5	81.9	80.4	-0.0036	0.1948	-47
-46	0.441	0.0099	65.3595	101.2	0.015	-1.3	81.8	80.5	-0.0031	0.1947	-46
-45	0.457	0.0099	63.2911	101.1	0.016	-1.1	81.7	80.7	-0.0025	0.1945	-45
-44	0.474	0.0099	61.3497	101.0	0.016	-0.8	81.6	80.8	-0.0020	0.1944	-44
-43	0.492	0.0099	59.1716	100.9	0.017	-0.6	81.6	80.9	-0.0015	0.1942	-43
-42	0.510	0.0099	57.1429	100.9	0.018	-0.4	81.5	81.1	-0.0010	0.1941	-42
-41	0.529	0.0099	55.2486	100.8	0.018	-0.2	81.4	81.2	-0.0005	0.1940	-41
-40	0.548	0.0099	53.4759	100.7	0.019	0.0	81.3	81.3	0.0000	0.1938	-40
-39	0.568	0.0099	51.8135	100.6	0.019	0.2	81.3	81.5	0.0005	0.1937	-39
-38	0.589	0.0099	50.0000	100.6	0.020	0.4	81.2	81.6	0.0010	0.1935	-38
-37	0.610	0.0100	48.3092	100.5	0.021	0.6	81.1	81.7	0.0015	0.1934	-37
-36	0.631	0.0100	46.7290	100.4	0.021	0.8	81.1	81.9	0.0019	0.1933	-36
-35	0.654	0.0100	45.2489	100.3	0.022	1.0	81.0	82.0	0.0024	0.1931	-35
-34	0.677	0.0100	43.8596	100.3	0.023	1.2	80.9	82.2	0.0029	0.1930	-34
-33	0.701	0.0100	42.5532	100.2	0.024	1.4	80.9	82.3	0.0033	0.1929	-33
-32	0.725	0.0100	41.1523	100.1	0.024	1.6	80.8	82.4	0.0038	0.1928	-32
-31	0.750	0.0100	39.8406	100.0	0.025	1.8	80.8	82.6	0.0043	0.1927	-31

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
-30	0.776	0.0100	38.6100	100.0	0.026	2.0	80.7	82.7	0.0047	0.1925	-30
-29	0.803	0.0100	37.4532	99.9	0.027	2.2	80.6	82.8	0.0052	0.1924	-29
-28	0.830	0.0100	36.2319	99.8	0.028	2.4	80.6	83.0	0.0056	0.1923	-28
-27	0.859	0.0100	35.0877	99.7	0.029	2.6	80.5	83.1	0.0061	0.1922	-27
-26	0.888	0.0100	34.0136	99.7	0.029	2.8	80.5	83.3	0.0065	0.1921	-26
-25	0.918	0.0100	33.0033	99.6	0.030	3.0	80.4	83.4	0.0070	0.1920	-25
-24	0.948	0.0100	32.0513	99.5	0.031	3.2	80.4	83.5	0.0074	0.1919	-24
-23	0.980	0.0101	31.0559	99.4	0.032	3.4	80.3	83.7	0.0078	0.1918	-23
-22	1.012	0.0101	30.1205	99.4	0.033	3.5	80.3	83.8	0.0083	0.1917	-22
-21	1.046	0.0101	29.2398	99.3	0.034	3.7	80.2	83.9	0.0087	0.1916	-21
-20	1.080	0.0101	28.3286	99.2	0.035	3.9	80.2	84.1	0.0091	0.1915	-20
-19	1.115	0.0101	27.4725	99.1	0.036	4.1	80.1	84.2	0.0096	0.1914	-19
-18	1.151	0.0101	26.6667	99.1	0.038	4.3	80.1	84.4	0.0100	0.1913	-18
-17	1.188	0.0101	25.9067	99.0	0.039	4.5	80.0	84.5	0.0104	0.1912	-17
-16	1.227	0.0101	25.1889	98.9	0.040	4.7	80.0	84.6	0.0108	0.1911	-16
-15	1.266	0.0101	24.4499	98.8	0.041	4.9	79.9	84.8	0.0113	0.1910	-15
-14	1.306	0.0101	23.7530	98.8	0.042	5.1	79.9	84.9	0.0117	0.1909	-14
-13	1.347	0.0101	23.0415	98.7	0.043	5.2	79.8	85.1	0.0121	0.1908	-13
-12	1.390	0.0101	22.3714	98.6	0.045	5.4	79.8	85.2	0.0125	0.1907	-12
-11	1.433	0.0102	21.7391	98.5	0.046	5.6	79.7	85.3	0.0130	0.1906	-11
-10	1.478	0.0102	21.1416	98.4	0.047	5.8	79.7	85.5	0.0134	0.1905	-10
-9	1.524	0.0102	20.5339	98.4	0.049	6.0	79.6	85.6	0.0138	0.1905	-9
-8	1.571	0.0102	19.9601	98.3	0.050	6.2	79.6	85.8	0.0142	0.1904	-8
-7	1.619	0.0102	19.4175	98.2	0.052	6.4	79.5	85.9	0.0146	0.1903	-7
-6	1.669	0.0102	18.8679	98.1	0.053	6.6	79.5	86.0	0.0151	0.1902	-6
-5	1.720	0.0102	18.3486	98.1	0.055	6.8	79.4	86.2	0.0155	0.1901	-5
-4	1.772	0.0102	17.8571	98.0	0.056	6.9	79.4	86.3	0.0159	0.1901	-4
-3	1.825	0.0102	17.3611	97.9	0.058	7.1	79.3	86.5	0.0163	0.1900	-3
-2	1.880	0.0102	16.8919	97.8	0.059	7.3	79.3	86.6	0.0167	0.1899	-2
-1	1.936	0.0102	16.4474	97.8	0.061	7.5	79.2	86.7	0.0171	0.1898	-1
0	1.993	0.0102	16.0000	97.7	0.063	7.7	79.2	86.9	0.0176	0.1898	0
1	2.052	0.0102	15.5521	97.6	0.064	7.9	79.1	87.0	0.0180	0.1897	1
2	2.113	0.0103	15.1515	97.5	0.066	8.1	79.1	87.2	0.0184	0.1896	2
3	2.174	0.0103	14.7493	97.4	0.068	8.3	79.0	87.3	0.0188	0.1896	3
4	2.238	0.0103	14.3472	97.4	0.070	8.5	79.0	87.4	0.0192	0.1895	4
5	2.303	0.0103	13.9860	97.3	0.072	8.7	78.9	87.6	0.0196	0.1894	5
6	2.369	0.0103	13.6054	97.2	0.074	8.9	78.9	87.7	0.0200	0.1894	6
7	2.437	0.0103	13.2626	97.1	0.075	9.1	78.8	87.9	0.0205	0.1893	7
8	2.507	0.0103	12.9199	97.0	0.077	9.3	78.7	88.0	0.0209	0.1893	8
9	2.578	0.0103	12.5786	97.0	0.080	9.4	78.7	88.1	0.0213	0.1892	9
10	2.651	0.0103	12.2549	96.9	0.082	9.6	78.6	88.3	0.0217	0.1892	10
11	2.726	0.0103	11.9474	96.8	0.084	9.8	78.6	88.4	0.0221	0.1891	11
12	2.802	0.0103	11.6414	96.7	0.086	10.0	78.5	88.6	0.0225	0.1890	12
13	2.880	0.0103	11.3507	96.7	0.088	10.2	78.5	88.7	0.0230	0.1890	13
14	2.960	0.0104	11.0619	96.6	0.090	10.4	78.4	88.9	0.0234	0.1889	14
15	3.042	0.0104	10.7759	96.5	0.093	10.6	78.4	89.0	0.0238	0.1889	15
16	3.126	0.0104	10.5152	96.4	0.095	10.8	78.3	89.1	0.0242	0.1888	16
17	3.212	0.0104	10.2459	96.3	0.098	11.0	78.3	89.3	0.0246	0.1888	17
18	3.299	0.0104	10.0000	96.3	0.100	11.2	78.2	89.4	0.0251	0.1888	18
19	3.389	0.0104	9.7466	96.2	0.103	11.4	78.1	89.6	0.0255	0.1887	19
20	3.480	0.0104	9.5147	96.1	0.105	11.6	78.1	89.7	0.0259	0.1887	20
21	3.574	0.0104	9.2764	96.0	0.108	11.8	78.0	89.8	0.0263	0.1886	21
22	3.669	0.0104	9.0498	95.9	0.111	12.0	78.0	90.0	0.0267	0.1886	22
23	3.767	0.0104	8.8339	95.9	0.113	12.2	77.9	90.1	0.0272	0.1885	23
24	3.867	0.0104	8.6207	95.8	0.116	12.4	77.8	90.3	0.0276	0.1885	24
25	3.969	0.0105	8.4104	95.7	0.119	12.6	77.8	90.4	0.0280	0.1885	25
26	4.073	0.0105	8.2102	95.6	0.122	12.9	77.7	90.6	0.0284	0.1884	26
27	4.180	0.0105	8.0192	95.5	0.125	13.1	77.6	90.7	0.0288	0.1884	27
28	4.288	0.0105	7.8309	95.5	0.128	13.3	77.6	90.8	0.0293	0.1884	28
29	4.400	0.0105	7.6453	95.4	0.131	13.5	77.5	91.0	0.0297	0.1883	29

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
30	4.513	0.0105	7.4627	95.3	0.134	13.7	77.5	91.1	0.0301	0.1883	30
31	4.629	0.0105	7.2886	95.2	0.137	13.9	77.4	91.3	0.0305	0.1883	31
32	4.747	0.0105	7.1225	95.1	0.140	14.1	77.3	91.4	0.0310	0.1882	32
33	4.868	0.0105	6.9541	95.0	0.144	14.3	77.3	91.6	0.0314	0.1882	33
34	4.991	0.0105	6.7935	95.0	0.147	14.5	77.2	91.7	0.0318	0.1882	34
35	5.117	0.0105	6.6401	94.9	0.151	14.7	77.1	91.9	0.0322	0.1882	35
36	5.245	0.0105	6.4893	94.8	0.154	14.9	77.1	92.0	0.0327	0.1881	36
37	5.376	0.0106	6.3412	94.7	0.158	15.1	77.0	92.1	0.0331	0.1881	37
38	5.509	0.0106	6.1958	94.6	0.161	15.4	76.9	92.3	0.0335	0.1881	38
39	5.646	0.0106	6.0569	94.6	0.165	15.6	76.9	92.4	0.0339	0.1881	39
40	5.785	0.0106	5.9207	94.5	0.169	15.8	76.8	92.6	0.0344	0.1881	40
41	5.927	0.0106	5.7904	94.4	0.173	16.0	76.7	92.7	0.0348	0.1880	41
42	6.071	0.0106	5.6593	94.3	0.177	16.2	76.6	92.9	0.0352	0.1880	42
43	6.219	0.0106	5.5340	94.2	0.181	16.4	76.6	93.0	0.0357	0.1880	43
44	6.369	0.0106	5.4142	94.1	0.185	16.7	76.5	93.2	0.0361	0.1880	44
45	6.522	0.0106	5.2938	94.1	0.189	16.9	76.4	93.3	0.0365	0.1880	45
46	6.679	0.0106	5.1787	94.0	0.193	17.1	76.4	93.4	0.0370	0.1880	46
47	6.838	0.0107	5.0659	93.9	0.197	17.3	76.3	93.6	0.0374	0.1879	47
48	7.000	0.0107	4.9554	93.8	0.202	17.5	76.2	93.7	0.0378	0.1879	48
49	7.166	0.0107	4.8497	93.7	0.206	17.7	76.1	93.9	0.0383	0.1879	49
50	7.334	0.0107	4.7461	93.6	0.211	18.0	76.1	94.0	0.0387	0.1879	50
51	7.506	0.0107	4.6425	93.6	0.215	18.2	76.0	94.2	0.0391	0.1879	51
52	7.681	0.0107	4.5455	93.5	0.220	18.4	75.9	94.3	0.0396	0.1879	52
53	7.860	0.0107	4.4484	93.4	0.225	18.6	75.8	94.5	0.0400	0.1879	53
54	8.041	0.0107	4.3535	93.3	0.230	18.9	75.7	94.6	0.0404	0.1879	54
55	8.226	0.0107	4.2626	93.2	0.235	19.1	75.7	94.7	0.0409	0.1879	55
56	8.415	0.0107	4.1736	93.1	0.240	19.3	75.6	94.9	0.0413	0.1879	56
57	8.607	0.0107	4.0866	93.1	0.245	19.5	75.5	95.0	0.0417	0.1879	57
58	8.802	0.0108	4.0016	93.0	0.250	19.8	75.4	95.2	0.0422	0.1879	58
59	9.001	0.0108	3.9185	92.9	0.255	20.0	75.3	95.3	0.0426	0.1879	59
60	9.203	0.0108	3.8388	92.8	0.261	20.2	75.3	95.5	0.0430	0.1879	60
61	9.410	0.0108	3.7594	92.7	0.266	20.4	75.2	95.6	0.0435	0.1879	61
62	9.619	0.0108	3.6832	92.6	0.272	20.7	75.1	95.8	0.0439	0.1879	62
63	9.833	0.0108	3.6075	92.6	0.277	20.9	75.0	95.9	0.0443	0.1879	63
64	10.050	0.0108	3.5348	92.5	0.283	21.1	74.9	96.1	0.0448	0.1879	64
65	10.272	0.0108	3.4638	92.4	0.289	21.4	74.8	96.2	0.0452	0.1879	65
66	10.497	0.0108	3.3944	92.3	0.295	21.6	74.8	96.3	0.0457	0.1879	66
67	10.726	0.0108	3.3267	92.2	0.301	21.8	74.7	96.5	0.0461	0.1879	67
68	10.958	0.0109	3.2605	92.1	0.307	22.0	74.6	96.6	0.0465	0.1879	68
69	11.195	0.0109	3.1959	92.0	0.313	22.3	74.5	96.8	0.0470	0.1879	69
70	11.436	0.0109	3.1328	92.0	0.319	22.5	74.4	96.9	0.0474	0.1879	70
71	11.682	0.0109	3.0713	91.9	0.326	22.7	74.3	97.1	0.0479	0.1879	71
72	11.931	0.0109	3.0111	91.8	0.332	23.0	74.2	97.2	0.0483	0.1879	72
73	12.184	0.0109	2.9525	91.7	0.339	23.2	74.2	97.4	0.0487	0.1879	73
74	12.442	0.0109	2.8952	91.6	0.345	23.4	74.1	97.5	0.0492	0.1880	74
75	12.704	0.0109	2.8393	91.5	0.352	23.7	74.0	97.7	0.0496	0.1880	75
76	12.970	0.0109	2.7840	91.4	0.359	23.9	73.9	97.8	0.0501	0.1880	76
77	13.241	0.0109	2.7307	91.3	0.366	24.2	73.8	98.0	0.0505	0.1880	77
78	13.517	0.0110	2.6788	91.3	0.373	24.4	73.7	98.1	0.0509	0.1880	78
79	13.796	0.0110	2.6274	91.2	0.381	24.6	73.6	98.2	0.0514	0.1880	79
80	14.081	0.0110	2.5780	91.1	0.388	24.9	73.5	98.4	0.0518	0.1880	80
81	14.369	0.0110	2.5291	91.0	0.395	25.1	73.4	98.5	0.0523	0.1881	81
82	14.663	0.0110	2.4814	90.9	0.403	25.3	73.3	98.7	0.0527	0.1881	82
83	14.961	0.0110	2.4355	90.8	0.411	25.6	73.2	98.8	0.0531	0.1881	83
84	15.264	0.0110	2.3901	90.7	0.418	25.8	73.1	99.0	0.0536	0.1881	84
85	15.572	0.0110	2.3452	90.6	0.426	26.1	73.1	99.1	0.0540	0.1881	85
86	15.885	0.0110	2.3020	90.6	0.434	26.3	73.0	99.3	0.0545	0.1882	86
87	16.203	0.0111	2.2594	90.5	0.443	26.6	72.9	99.4	0.0549	0.1882	87
88	16.525	0.0111	2.2183	90.4	0.451	26.8	72.8	99.6	0.0553	0.1882	88
89	16.853	0.0111	2.1777	90.3	0.459	27.0	72.7	99.7	0.0558	0.1882	89

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
90	17.186	0.0111	2.1381	90.2	0.468	27.3	72.6	99.9	0.0562	0.1883	90
91	17.523	0.0111	2.0991	90.1	0.476	27.5	72.5	100.0	0.0567	0.1883	91
92	17.866	0.0111	2.0610	90.0	0.485	27.8	72.4	100.1	0.0571	0.1883	92
93	18.215	0.0111	2.0239	89.9	0.494	28.0	72.3	100.3	0.0576	0.1883	93
94	18.568	0.0111	1.9877	89.8	0.503	28.3	72.2	100.4	0.0580	0.1884	94
95	18.927	0.0111	1.9524	89.8	0.512	28.5	72.1	100.6	0.0584	0.1884	95
96	19.291	0.0112	1.9175	89.7	0.522	28.7	72.0	100.7	0.0589	0.1884	96
97	19.661	0.0112	1.8836	89.6	0.531	29.0	71.9	100.9	0.0593	0.1884	97
98	20.036	0.0112	1.8501	89.5	0.541	29.2	71.8	101.0	0.0598	0.1885	98
99	20.417	0.0112	1.8179	89.4	0.550	29.5	71.7	101.2	0.0602	0.1885	99
100	20.803	0.0112	1.7857	89.3	0.560	29.7	71.6	101.3	0.0606	0.1885	100
101	21.195	0.0112	1.7547	89.2	0.570	30.0	71.5	101.5	0.0611	0.1886	101
102	21.593	0.0112	1.7241	89.1	0.580	30.2	71.4	101.6	0.0615	0.1886	102
103	21.997	0.0112	1.6943	89.0	0.590	30.5	71.3	101.8	0.0620	0.1886	103
104	22.406	0.0112	1.6650	88.9	0.601	30.7	71.2	101.9	0.0624	0.1887	104
105	22.821	0.0113	1.6364	88.8	0.611	31.0	71.1	102.0	0.0628	0.1887	105
106	23.242	0.0113	1.6082	88.8	0.622	31.2	71.0	102.2	0.0633	0.1887	106
107	23.670	0.0113	1.5808	88.7	0.633	31.5	70.9	102.3	0.0637	0.1888	107
108	24.103	0.0113	1.5540	88.6	0.644	31.7	70.8	102.5	0.0642	0.1888	108
109	24.542	0.0113	1.5277	88.5	0.655	32.0	70.6	102.6	0.0646	0.1888	109
110	24.988	0.0113	1.5017	88.4	0.666	32.2	70.5	102.8	0.0650	0.1889	110
111	25.440	0.0113	1.4765	88.3	0.677	32.5	70.4	102.9	0.0655	0.1889	111
112	25.898	0.0113	1.4518	88.2	0.689	32.7	70.3	103.1	0.0659	0.1890	112
113	26.362	0.0113	1.4276	88.1	0.701	33.0	70.2	103.2	0.0664	0.1890	113
114	26.833	0.0114	1.4037	88.0	0.712	33.2	70.1	103.4	0.0668	0.1890	114
115	27.310	0.0114	1.3805	87.9	0.724	33.5	70.0	103.5	0.0672	0.1891	115
116	27.794	0.0114	1.3576	87.8	0.737	33.7	69.9	103.6	0.0677	0.1891	116
117	28.284	0.0114	1.3353	87.7	0.749	34.0	69.8	103.8	0.0681	0.1891	117
118	28.781	0.0114	1.3134	87.6	0.761	34.3	69.7	103.9	0.0686	0.1892	118
119	29.285	0.0114	1.2918	87.6	0.774	34.5	69.6	104.1	0.0690	0.1892	119
120	29.796	0.0114	1.2708	87.5	0.787	34.8	69.5	104.2	0.0694	0.1893	120
121	30.313	0.0114	1.2502	87.4	0.800	35.0	69.4	104.4	0.0699	0.1893	121
122	30.837	0.0115	1.2300	87.3	0.813	35.3	69.2	104.5	0.0703	0.1894	122
123	31.368	0.0115	1.2102	87.2	0.826	35.5	69.1	104.7	0.0707	0.1894	123
124	31.906	0.0115	1.1908	87.1	0.840	35.8	69.0	104.8	0.0712	0.1894	124
125	32.451	0.0115	1.1716	87.0	0.854	36.0	68.9	105.0	0.0716	0.1895	125
126	33.004	0.0115	1.1529	86.9	0.867	36.3	68.8	105.1	0.0721	0.1895	126
127	33.563	0.0115	1.1346	86.8	0.881	36.6	68.7	105.2	0.0725	0.1896	127
128	34.130	0.0115	1.1166	86.7	0.896	36.8	68.6	105.4	0.0729	0.1896	128
129	34.703	0.0115	1.0989	86.6	0.910	37.1	68.5	105.5	0.0734	0.1897	129
130	35.285	0.0116	1.0817	86.5	0.925	37.3	68.3	105.7	0.0738	0.1897	130
131	35.873	0.0116	1.0646	86.4	0.939	37.6	68.2	105.8	0.0742	0.1898	131
132	36.470	0.0116	1.0480	86.3	0.954	37.8	68.1	106.0	0.0747	0.1898	132
133	37.073	0.0116	1.0317	86.2	0.969	38.1	68.0	106.1	0.0751	0.1899	133
134	37.684	0.0116	1.0156	86.1	0.985	38.4	67.9	106.3	0.0755	0.1899	134
135	38.303	0.0116	0.9999	86.0	1.000	38.6	67.8	106.4	0.0760	0.1899	135
136	38.930	0.0116	0.9844	85.9	1.016	38.9	67.7	106.5	0.0764	0.1900	136
137	39.565	0.0117	0.9693	85.8	1.032	39.1	67.5	106.7	0.0768	0.1900	137
138	40.207	0.0117	0.9545	85.7	1.048	39.4	67.4	106.8	0.0773	0.1901	138
139	40.857	0.0117	0.9398	85.6	1.064	39.7	67.3	107.0	0.0777	0.1901	139
140	41.515	0.0117	0.9255	85.5	1.081	39.9	67.2	107.1	0.0781	0.1902	140
141	42.181	0.0117	0.9115	85.4	1.097	40.2	67.1	107.3	0.0786	0.1902	141
142	42.856	0.0117	0.8977	85.3	1.114	40.4	67.0	107.4	0.0790	0.1903	142
143	43.538	0.0117	0.8841	85.2	1.131	40.7	66.8	107.5	0.0794	0.1903	143
144	44.229	0.0117	0.8708	85.2	1.148	41.0	66.7	107.7	0.0799	0.1904	144
145	44.928	0.0118	0.8578	85.1	1.166	41.2	66.6	107.8	0.0803	0.1904	145
146	45.635	0.0118	0.8449	85.0	1.184	41.5	66.5	108.0	0.0807	0.1905	146
147	46.351	0.0118	0.8323	84.9	1.202	41.7	66.4	108.1	0.0812	0.1905	147
148	47.075	0.0118	0.8199	84.8	1.220	42.0	66.2	108.3	0.0816	0.1906	148
149	47.808	0.0118	0.8078	84.7	1.238	42.3	66.1	108.4	0.0820	0.1906	149

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
150	48.549	0.0118	0.7959	84.6	1.257	42.5	66.0	108.5	0.0824	0.1907	150
151	49.299	0.0118	0.7841	84.5	1.275	42.8	65.9	108.7	0.0829	0.1907	151
152	50.058	0.0119	0.7726	84.4	1.294	43.1	65.8	108.8	0.0833	0.1908	152
153	50.825	0.0119	0.7613	84.3	1.314	43.3	65.6	109.0	0.0837	0.1909	153
154	51.602	0.0119	0.7502	84.2	1.333	43.6	65.5	109.1	0.0842	0.1909	154
155	52.387	0.0119	0.7393	84.1	1.353	43.9	65.4	109.2	0.0846	0.1910	155
156	53.181	0.0119	0.7285	84.0	1.373	44.1	65.3	109.4	0.0850	0.1910	156
157	53.985	0.0119	0.7180	83.8	1.393	44.4	65.1	109.5	0.0854	0.1911	157
158	54.797	0.0119	0.7077	83.7	1.413	44.6	65.0	109.7	0.0859	0.1911	158
159	55.619	0.0120	0.6974	83.6	1.434	44.9	64.9	109.8	0.0863	0.1912	159
160	56.450	0.0120	0.6875	83.5	1.455	45.2	64.8	109.9	0.0867	0.1912	160
161	57.290	0.0120	0.6776	83.4	1.476	45.4	64.6	110.1	0.0871	0.1913	161
162	58.140	0.0120	0.6680	83.3	1.497	45.7	64.5	110.2	0.0876	0.1913	162
163	58.999	0.0120	0.6585	83.2	1.519	46.0	64.4	110.4	0.0880	0.1914	163
164	59.868	0.0120	0.6491	83.1	1.541	46.2	64.3	110.5	0.0884	0.1914	164
165	60.746	0.0120	0.6399	83.0	1.563	46.5	64.1	110.6	0.0888	0.1915	165
166	61.634	0.0121	0.6309	82.9	1.585	46.8	64.0	110.8	0.0892	0.1916	166
167	62.532	0.0121	0.6220	82.8	1.608	47.0	63.9	110.9	0.0897	0.1916	167
168	63.439	0.0121	0.6133	82.7	1.631	47.3	63.8	111.1	0.0901	0.1917	168
169	64.357	0.0121	0.6047	82.6	1.654	47.6	63.6	111.2	0.0905	0.1917	169
170	65.284	0.0121	0.5963	82.5	1.677	47.8	63.5	111.3	0.0909	0.1918	170
171	66.221	0.0121	0.5880	82.4	1.701	48.1	63.4	111.5	0.0914	0.1918	171
172	67.169	0.0122	0.5798	82.3	1.725	48.4	63.2	111.6	0.0918	0.1919	172
173	68.126	0.0122	0.5718	82.2	1.749	48.6	63.1	111.7	0.0922	0.1919	173
174	69.094	0.0122	0.5639	82.1	1.773	48.9	63.0	111.9	0.0926	0.1920	174
175	70.072	0.0122	0.5561	82.0	1.798	49.2	62.8	112.0	0.0930	0.1921	175
176	71.060	0.0122	0.5485	81.9	1.823	49.4	62.7	112.2	0.0934	0.1921	176
177	72.059	0.0122	0.5410	81.8	1.849	49.7	62.6	112.3	0.0939	0.1922	177
178	73.068	0.0122	0.5336	81.7	1.874	50.0	62.5	112.4	0.0943	0.1922	178
179	74.088	0.0123	0.5263	81.6	1.900	50.2	62.3	112.6	0.0947	0.1923	179
180	75.118	0.0123	0.5192	81.4	1.926	50.5	62.2	112.7	0.0951	0.1923	180
181	76.159	0.0123	0.5121	81.3	1.953	50.8	62.1	112.8	0.0955	0.1924	181
182	77.211	0.0123	0.5052	81.2	1.980	51.0	61.9	113.0	0.0959	0.1924	182
183	78.274	0.0123	0.4984	81.1	2.007	51.3	61.8	113.1	0.0964	0.1925	183
184	79.348	0.0123	0.4916	81.0	2.034	51.6	61.6	113.2	0.0968	0.1926	184
185	80.432	0.0124	0.4850	80.9	2.062	51.9	61.5	113.4	0.0972	0.1926	185
186	81.528	0.0124	0.4785	80.8	2.090	52.1	61.4	113.5	0.0976	0.1927	186
187	82.635	0.0124	0.4721	80.7	2.118	52.4	61.2	113.6	0.0980	0.1927	187
188	83.753	0.0124	0.4659	80.6	2.147	52.7	61.1	113.8	0.0984	0.1928	188
189	84.882	0.0124	0.4596	80.5	2.176	52.9	61.0	113.9	0.0988	0.1928	189
190	86.023	0.0124	0.4536	80.4	2.205	53.2	60.8	114.0	0.0993	0.1929	190
191	87.175	0.0125	0.4475	80.2	2.234	53.5	60.7	114.2	0.0997	0.1929	191
192	88.339	0.0125	0.4416	80.1	2.264	53.7	60.6	114.3	0.1001	0.1930	192
193	89.514	0.0125	0.4358	80.0	2.295	54.0	60.4	114.4	0.1005	0.1931	193
194	90.700	0.0125	0.4301	79.9	2.325	54.3	60.3	114.6	0.1009	0.1931	194
195	91.899	0.0125	0.4244	79.8	2.356	54.6	60.1	114.7	0.1013	0.1932	195
196	93.109	0.0126	0.4189	79.7	2.387	54.8	60.0	114.8	0.1017	0.1932	196
197	94.331	0.0126	0.4134	79.6	2.419	55.1	59.9	115.0	0.1021	0.1933	197
198	95.565	0.0126	0.4080	79.5	2.451	55.4	59.7	115.1	0.1025	0.1933	198
199	96.811	0.0126	0.4027	79.3	2.483	55.6	59.6	115.2	0.1029	0.1934	199
200	98.069	0.0126	0.3975	79.2	2.516	55.9	59.4	115.3	0.1034	0.1934	200
201	99.340	0.0126	0.3923	79.1	2.549	56.2	59.3	115.5	0.1038	0.1935	201
202	100.622	0.0127	0.3872	79.0	2.583	56.5	59.1	115.6	0.1042	0.1935	202
203	101.917	0.0127	0.3822	78.9	2.616	56.7	59.0	115.7	0.1046	0.1936	203
204	103.224	0.0127	0.3773	78.8	2.650	57.0	58.8	115.9	0.1050	0.1937	204
205	104.544	0.0127	0.3725	78.7	2.685	57.3	58.7	116.0	0.1054	0.1937	205
206	105.876	0.0127	0.3677	78.5	2.720	57.6	58.6	116.1	0.1058	0.1938	206
207	107.221	0.0128	0.3630	78.4	2.755	57.8	58.4	116.2	0.1062	0.1938	207
208	108.578	0.0128	0.3583	78.3	2.791	58.1	58.3	116.4	0.1066	0.1939	208
209	109.948	0.0128	0.3538	78.2	2.827	58.4	58.1	116.5	0.1070	0.1939	209

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
210	111.331	0.0128	0.3492	78.1	2.863	58.6	58.0	116.6	0.1074	0.1940	210
211	112.727	0.0128	0.3448	78.0	2.900	58.9	57.8	116.7	0.1078	0.1940	211
212	114.136	0.0128	0.3404	77.8	2.937	59.2	57.7	116.9	0.1082	0.1941	212
213	115.558	0.0129	0.3361	77.7	2.975	59.5	57.5	117.0	0.1086	0.1941	213
214	116.993	0.0129	0.3319	77.6	3.013	59.7	57.4	117.1	0.1090	0.1942	214
215	118.442	0.0129	0.3277	77.5	3.052	60.0	57.2	117.2	0.1094	0.1942	215
216	119.903	0.0129	0.3236	77.4	3.091	60.3	57.1	117.4	0.1098	0.1943	216
217	121.378	0.0129	0.3195	77.2	3.130	60.6	56.9	117.5	0.1102	0.1943	217
218	122.867	0.0130	0.3155	77.1	3.170	60.8	56.8	117.6	0.1106	0.1944	218
219	124.369	0.0130	0.3115	77.0	3.210	61.1	56.6	117.7	0.1110	0.1944	219
220	125.885	0.0130	0.3076	76.9	3.251	61.4	56.5	117.8	0.1114	0.1945	220
221	127.414	0.0130	0.3038	76.8	3.292	61.7	56.3	118.0	0.1118	0.1945	221
222	128.957	0.0130	0.3000	76.6	3.333	61.9	56.1	118.1	0.1122	0.1946	222
223	130.514	0.0131	0.2963	76.5	3.376	62.2	56.0	118.2	0.1126	0.1946	223
224	132.085	0.0131	0.2926	76.4	3.418	62.5	55.8	118.3	0.1130	0.1947	224
225	133.670	0.0131	0.2889	76.3	3.461	62.8	55.7	118.4	0.1134	0.1947	225
226	135.269	0.0131	0.2854	76.1	3.504	63.0	55.5	118.6	0.1138	0.1948	226
227	136.882	0.0132	0.2818	76.0	3.548	63.3	55.4	118.7	0.1142	0.1948	227
228	138.510	0.0132	0.2783	75.9	3.593	63.6	55.2	118.8	0.1146	0.1949	228
229	140.152	0.0132	0.2749	75.8	3.638	63.9	55.0	118.9	0.1150	0.1949	229
230	141.808	0.0132	0.2715	75.6	3.683	64.2	54.9	119.0	0.1154	0.1950	230
231	143.479	0.0132	0.2682	75.5	3.729	64.4	54.7	119.1	0.1158	0.1950	231
232	145.164	0.0133	0.2649	75.4	3.775	64.7	54.5	119.3	0.1162	0.1951	232
233	146.864	0.0133	0.2616	75.3	3.822	65.0	54.4	119.4	0.1166	0.1951	233
234	148.579	0.0133	0.2584	75.1	3.870	65.3	54.2	119.5	0.1170	0.1952	234
235	150.308	0.0133	0.2552	75.0	3.918	65.5	54.1	119.6	0.1174	0.1952	235
236	152.053	0.0134	0.2521	74.9	3.966	65.8	53.9	119.7	0.1178	0.1953	236
237	153.812	0.0134	0.2490	74.7	4.015	66.1	53.7	119.8	0.1182	0.1953	237
238	155.587	0.0134	0.2460	74.6	4.065	66.4	53.6	119.9	0.1186	0.1953	238
239	157.376	0.0134	0.2430	74.5	4.115	66.7	53.4	120.1	0.1190	0.1954	239
240	159.180	0.0134	0.2400	74.4	4.166	66.9	53.2	120.2	0.1194	0.1954	240
241	161.000	0.0135	0.2371	74.2	4.217	67.2	53.0	120.3	0.1198	0.1955	241
242	162.836	0.0135	0.2342	74.1	4.269	67.5	52.9	120.4	0.1202	0.1955	242
243	164.688	0.0135	0.2314	74.0	4.322	67.8	52.7	120.5	0.1205	0.1956	243
244	166.555	0.0135	0.2286	73.8	4.375	68.1	52.5	120.6	0.1209	0.1956	244
245	168.438	0.0136	0.2258	73.7	4.428	68.3	52.4	120.7	0.1213	0.1956	245
246	170.336	0.0136	0.2231	73.6	4.483	68.6	52.2	120.8	0.1217	0.1957	246
247	172.250	0.0136	0.2204	73.4	4.538	68.9	52.0	120.9	0.1221	0.1957	247
248	174.181	0.0136	0.2177	73.3	4.593	69.2	51.8	121.0	0.1225	0.1958	248
249	176.127	0.0137	0.2151	73.2	4.649	69.5	51.7	121.1	0.1229	0.1958	249
250	178.090	0.0137	0.2125	73.0	4.706	69.8	51.5	121.2	0.1233	0.1958	250
251	180.068	0.0137	0.2099	72.9	4.764	70.0	51.3	121.3	0.1237	0.1959	251
252	182.063	0.0137	0.2074	72.7	4.822	70.3	51.1	121.4	0.1241	0.1959	252
253	184.075	0.0138	0.2049	72.6	4.881	70.6	50.9	121.5	0.1245	0.1959	253
254	186.102	0.0138	0.2024	72.5	4.940	70.9	50.8	121.6	0.1249	0.1960	254
255	188.147	0.0138	0.2000	72.3	5.000	71.2	50.6	121.8	0.1253	0.1960	255
256	190.208	0.0139	0.1976	72.2	5.061	71.5	50.4	121.9	0.1256	0.1960	256
257	192.286	0.0139	0.1952	72.0	5.123	71.8	50.2	122.0	0.1260	0.1961	257
258	194.381	0.0139	0.1929	71.9	5.185	72.0	50.0	122.0	0.1264	0.1961	258
259	196.492	0.0139	0.1905	71.8	5.248	72.3	49.8	122.1	0.1268	0.1961	259
260	198.621	0.0140	0.1883	71.6	5.312	72.6	49.6	122.2	0.1272	0.1962	260
261	200.767	0.0140	0.1860	71.5	5.377	72.9	49.4	122.3	0.1276	0.1962	261
262	202.930	0.0140	0.1838	71.3	5.442	73.2	49.3	122.4	0.1280	0.1962	262
263	205.110	0.0141	0.1816	71.2	5.508	73.5	49.1	122.5	0.1284	0.1963	263
264	207.308	0.0141	0.1794	71.0	5.575	73.8	48.9	122.6	0.1288	0.1963	264
265	209.523	0.0141	0.1772	70.9	5.643	74.0	48.7	122.7	0.1292	0.1963	265
266	211.755	0.0141	0.1751	70.7	5.711	74.3	48.5	122.8	0.1295	0.1964	266
267	214.006	0.0142	0.1730	70.6	5.781	74.6	48.3	122.9	0.1299	0.1964	267
268	216.274	0.0142	0.1709	70.4	5.851	74.9	48.1	123.0	0.1303	0.1964	268
269	218.560	0.0142	0.1689	70.3	5.922	75.2	47.9	123.1	0.1307	0.1964	269

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
270	220.865	0.0143	0.1668	70.1	5.994	75.5	47.7	123.2	0.1311	0.1965	270
271	223.187	0.0143	0.1648	70.0	6.067	75.8	47.5	123.3	0.1315	0.1965	271
272	225.527	0.0143	0.1628	69.8	6.141	76.1	47.3	123.4	0.1319	0.1965	272
273	227.886	0.0144	0.1609	69.7	6.216	76.4	47.1	123.4	0.1323	0.1965	273
274	230.263	0.0144	0.1590	69.5	6.291	76.7	46.9	123.5	0.1327	0.1966	274
275	232.658	0.0144	0.1570	69.4	6.368	77.0	46.7	123.6	0.1331	0.1966	275
276	235.072	0.0145	0.1551	69.2	6.445	77.3	46.4	123.7	0.1335	0.1966	276
277	237.505	0.0145	0.1533	69.0	6.524	77.5	46.2	123.8	0.1338	0.1966	277
278	239.957	0.0145	0.1514	68.9	6.604	77.8	46.0	123.9	0.1342	0.1966	278
279	242.427	0.0146	0.1496	68.7	6.684	78.1	45.8	123.9	0.1346	0.1966	279
280	244.917	0.0146	0.1478	68.6	6.766	78.4	45.6	124.0	0.1350	0.1967	280
281	247.425	0.0146	0.1460	68.4	6.849	78.7	45.4	124.1	0.1354	0.1967	281
282	249.953	0.0147	0.1442	68.2	6.933	79.0	45.2	124.2	0.1358	0.1967	282
283	252.500	0.0147	0.1425	68.1	7.018	79.3	44.9	124.3	0.1362	0.1967	283
284	255.067	0.0147	0.1408	67.9	7.104	79.6	44.7	124.3	0.1366	0.1967	284
285	257.653	0.0148	0.1391	67.7	7.191	79.9	44.5	124.4	0.1370	0.1967	285
286	260.259	0.0148	0.1374	67.6	7.280	80.2	44.3	124.5	0.1374	0.1967	286
287	262.884	0.0148	0.1357	67.4	7.370	80.5	44.0	124.6	0.1378	0.1967	287
288	265.530	0.0149	0.1340	67.2	7.461	80.8	43.8	124.6	0.1382	0.1968	288
289	268.195	0.0149	0.1324	67.1	7.553	81.1	43.6	124.7	0.1386	0.1968	289
290	270.881	0.0150	0.1308	66.9	7.647	81.4	43.3	124.8	0.1389	0.1968	290
291	273.586	0.0150	0.1292	66.7	7.742	81.7	43.1	124.8	0.1393	0.1968	291
292	276.312	0.0150	0.1276	66.5	7.838	82.0	42.9	124.9	0.1397	0.1968	292
293	279.059	0.0151	0.1260	66.4	7.936	82.3	42.6	125.0	0.1401	0.1968	293
294	281.826	0.0151	0.1245	66.2	8.035	82.6	42.4	125.0	0.1405	0.1968	294
295	284.614	0.0152	0.1229	66.0	8.135	83.0	42.1	125.1	0.1409	0.1968	295
296	287.423	0.0152	0.1214	65.8	8.237	83.3	41.9	125.2	0.1413	0.1968	296
297	290.252	0.0152	0.1199	65.6	8.341	83.6	41.6	125.2	0.1417	0.1968	297
298	293.103	0.0153	0.1184	65.4	8.446	83.9	41.4	125.3	0.1421	0.1968	298
299	295.975	0.0153	0.1169	65.3	8.553	84.2	41.1	125.3	0.1425	0.1967	299
300	298.868	0.0154	0.1155	65.1	8.662	84.5	40.9	125.4	0.1429	0.1967	300
301	301.783	0.0154	0.1140	64.9	8.772	84.8	40.6	125.4	0.1433	0.1967	301
302	304.719	0.0155	0.1126	64.7	8.884	85.1	40.4	125.5	0.1437	0.1967	302
303	307.677	0.0155	0.1111	64.5	8.998	85.4	40.1	125.5	0.1441	0.1967	303
304	310.658	0.0156	0.1097	64.3	9.113	85.8	39.8	125.6	0.1445	0.1967	304
305	313.660	0.0156	0.1083	64.1	9.231	86.1	39.6	125.6	0.1449	0.1967	305
306	316.684	0.0157	0.1070	63.9	9.350	86.4	39.3	125.7	0.1453	0.1966	306
307	319.730	0.0157	0.1056	63.7	9.472	86.7	39.0	125.7	0.1457	0.1966	307
308	322.800	0.0158	0.1042	63.5	9.595	87.0	38.7	125.8	0.1461	0.1966	308
309	325.891	0.0158	0.1029	63.3	9.721	87.4	38.5	125.8	0.1465	0.1966	309
310	329.006	0.0159	0.1015	63.1	9.849	87.7	38.2	125.8	0.1469	0.1965	310
311	332.143	0.0159	0.1002	62.9	9.979	88.0	37.9	125.9	0.1474	0.1965	311
312	335.304	0.0160	0.0989	62.6	10.112	88.3	37.6	125.9	0.1478	0.1965	312
313	338.488	0.0160	0.0976	62.4	10.247	88.6	37.3	125.9	0.1482	0.1964	313
314	341.695	0.0161	0.0963	62.2	10.385	89.0	37.0	126.0	0.1486	0.1964	314
315	344.926	0.0161	0.0950	62.0	10.525	89.3	36.7	126.0	0.1490	0.1964	315
316	348.181	0.0162	0.0937	61.8	10.668	89.6	36.4	126.0	0.1494	0.1963	316
317	351.460	0.0163	0.0925	61.5	10.814	90.0	36.1	126.0	0.1498	0.1963	317
318	354.763	0.0163	0.0912	61.3	10.963	90.3	35.8	126.1	0.1502	0.1962	318
319	358.090	0.0164	0.0900	61.1	11.115	90.6	35.4	126.1	0.1507	0.1962	319
320	361.442	0.0164	0.0887	60.8	11.270	91.0	35.1	126.1	0.1511	0.1961	320
321	364.818	0.0165	0.0875	60.6	11.428	91.3	34.8	126.1	0.1515	0.1961	321
322	368.220	0.0166	0.0863	60.3	11.590	91.7	34.4	126.1	0.1519	0.1960	322
323	371.647	0.0166	0.0851	60.1	11.755	92.0	34.1	126.1	0.1523	0.1959	323
324	375.099	0.0167	0.0839	59.8	11.924	92.3	33.8	126.1	0.1528	0.1959	324
325	378.577	0.0168	0.0827	59.6	12.097	92.7	33.4	126.1	0.1532	0.1958	325
326	382.081	0.0169	0.0815	59.3	12.274	93.0	33.1	126.1	0.1536	0.1957	326
327	385.611	0.0169	0.0803	59.1	12.456	93.4	32.7	126.1	0.1541	0.1956	327
328	389.167	0.0170	0.0791	58.8	12.642	93.7	32.3	126.1	0.1545	0.1955	328
329	392.751	0.0171	0.0779	58.5	12.832	94.1	32.0	126.0	0.1549	0.1955	329

Table 1 (continued)
HCFC-123 Saturation Properties—Temperature Table

TEMP. °F	PRESSURE psia	VOLUME ft ³ /lb		DENSITY lb/ft ³		ENTHALPY Btu/lb			ENTROPY Btu/(lb)(°R)		TEMP. °F
		LIQUID v _f	VAPOR v _g	LIQUID 1/v _f	VAPOR 1/v _g	LIQUID h _f	LATENT h _{fg}	VAPOR h _g	LIQUID s _f	VAPOR s _g	
330	396.361	0.0172	0.0768	58.2	13.028	94.5	31.6	126.0	0.1554	0.1954	330
331	399.998	0.0173	0.0756	57.9	13.229	94.8	31.2	126.0	0.1558	0.1953	331
332	403.663	0.0173	0.0744	57.7	13.435	95.2	30.8	126.0	0.1563	0.1952	332
333	407.355	0.0174	0.0733	57.4	13.648	95.5	30.4	125.9	0.1567	0.1950	333
334	411.076	0.0175	0.0721	57.1	13.866	95.9	30.0	125.9	0.1572	0.1949	334
335	414.825	0.0176	0.0710	56.7	14.091	96.3	29.5	125.8	0.1576	0.1948	335
336	418.604	0.0177	0.0698	56.4	14.323	96.7	29.1	125.8	0.1581	0.1947	336
337	422.411	0.0178	0.0687	56.1	14.563	97.0	28.7	125.7	0.1585	0.1945	337
338	426.248	0.0179	0.0675	55.8	14.811	97.4	28.2	125.6	0.1590	0.1944	338
339	430.115	0.0180	0.0664	55.4	15.067	97.8	27.7	125.6	0.1595	0.1942	339
340	434.013	0.0182	0.0652	55.1	15.332	98.2	27.3	125.5	0.1599	0.1940	340
341	437.942	0.0183	0.0641	54.7	15.607	98.6	26.8	125.4	0.1604	0.1939	341
342	441.902	0.0184	0.0629	54.4	15.893	99.0	26.3	125.3	0.1609	0.1937	342
343	445.884	0.0185	0.0618	54.0	16.191	99.4	25.8	125.2	0.1614	0.1935	343
344	449.911	0.0187	0.0606	53.6	16.501	99.8	25.2	125.0	0.1619	0.1933	344
345	453.970	0.0188	0.0594	53.2	16.825	100.2	24.7	124.9	0.1624	0.1930	345
346	458.063	0.0190	0.0583	52.8	17.164	100.7	24.1	124.8	0.1629	0.1928	346
347	462.190	0.0191	0.0571	52.3	17.520	101.1	23.5	124.6	0.1634	0.1926	347
348	466.352	0.0193	0.0559	51.9	17.894	101.5	22.9	124.4	0.1640	0.1923	348
349	470.550	0.0195	0.0547	51.4	18.290	102.0	22.2	124.2	0.1645	0.1920	349
350	474.785	0.0197	0.0535	50.9	18.709	102.4	21.6	124.0	0.1650	0.1917	350
351	479.057	0.0199	0.0522	50.4	19.154	102.9	20.8	123.8	0.1656	0.1913	351
352	483.368	0.0201	0.0509	49.8	19.630	103.4	20.1	123.5	0.1662	0.1909	352
353	487.719	0.0203	0.0496	49.2	20.142	103.9	19.3	123.2	0.1668	0.1905	353
354	492.111	0.0206	0.0483	48.6	20.695	104.4	18.4	122.9	0.1674	0.1901	354
355	496.545	0.0209	0.0470	47.9	21.299	105.0	17.5	122.5	0.1680	0.1896	355
356	501.024	0.0212	0.0455	47.2	21.964	105.5	16.6	122.1	0.1687	0.1890	356
357	505.549	0.0215	0.0440	46.4	22.706	106.1	15.5	121.6	0.1694	0.1884	357
358	510.122	0.0220	0.0425	45.5	23.549	106.8	14.3	121.1	0.1702	0.1877	358
359	514.745	0.0225	0.0408	44.5	24.532	107.5	12.9	120.4	0.1711	0.1868	359
360	519.422	0.0231	0.0389	43.3	25.722	108.3	11.3	119.6	0.1720	0.1858	360
361	524.157	0.0240	0.0367	41.7	27.267	109.3	9.2	118.5	0.1733	0.1844	361
362	528.954	0.0255	0.0337	39.2	29.644	110.8	6.1	116.9	0.1750	0.1824	362

Table 2 HCFC-123 Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
 Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

PRESSURE = 1.00 PSIA							PRESSURE = 2.00 PSIA							TEMP
TEMP °F	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	°F
-22.38	0.0101	3.5	0.0081	0.1903	1.5277	3147.9	SAT LIQ	0.0102	7.7	0.0176	0.1913	1.5024	2870.5	0.11
-22.38	30.4546	83.8	0.1917	0.1460	1.1053	393.4	SAT VAP	15.9424	86.9	0.1898	0.1514	1.1045	401.5	0.11
-20	30.6244	84.1	0.1925	0.1463	1.1048	394.4		—	—	—	—	—	—	-20
-10	31.3478	85.6	0.1958	0.1477	1.1026	398.8		—	—	—	—	—	—	-10
0	32.0682	87.1	0.1991	0.1492	1.1006	403.2		—	—	—	—	—	—	0
10	32.7859	88.6	0.2023	0.1506	1.0988	407.5		16.3054	88.4	0.1930	0.1526	1.1021	405.9	10
20	33.5014	90.1	0.2055	0.1521	1.0972	411.7		16.6703	89.9	0.1962	0.1538	1.0999	410.2	20
30	34.2150	91.6	0.2086	0.1536	1.0956	415.8		17.0333	91.5	0.1994	0.1551	1.0980	414.5	30
40	34.9271	93.1	0.2117	0.1552	1.0942	420.0		17.3947	93.0	0.2026	0.1564	1.0962	418.7	40
50	35.6379	94.7	0.2148	0.1567	1.0928	424.0		17.7547	94.6	0.2057	0.1578	1.0946	422.8	50
60	36.3475	96.3	0.2179	0.1582	1.0915	428.0		18.1136	96.2	0.2087	0.1591	1.0931	426.9	60
70	37.0562	97.9	0.2209	0.1598	1.0903	432.0		18.4715	97.8	0.2118	0.1606	1.0917	430.9	70
80	37.7641	99.5	0.2239	0.1613	1.0892	435.9		18.8285	99.4	0.2148	0.1620	1.0904	434.9	80
90	38.4713	101.1	0.2269	0.1628	1.0881	439.8		19.1849	101.0	0.2178	0.1634	1.0892	438.9	90
100	39.1754	102.7	0.2299	0.1643	1.0871	443.7		19.5407	102.7	0.2208	0.1648	1.0881	442.8	100
110	39.8875	104.4	0.2328	0.1658	1.0861	447.5		19.8960	104.3	0.2237	0.1663	1.0870	446.6	110
120	40.5879	106.0	0.2357	0.1673	1.0852	451.3		20.2495	106.0	0.2266	0.1677	1.0860	450.4	120
130	41.2971	107.7	0.2386	0.1688	1.0843	455.0		20.6065	107.7	0.2295	0.1692	1.0850	454.2	130
140	41.9980	109.4	0.2414	0.1703	1.0834	458.7		20.9591	109.4	0.2323	0.1706	1.0841	458.0	140
150	42.7083	111.1	0.2442	0.1718	1.0826	462.4		21.3149	111.1	0.2352	0.1720	1.0832	461.7	150
160	43.4090	112.9	0.2470	0.1732	1.0818	466.0		21.6654	112.8	0.2380	0.1735	1.0824	465.4	160
170	44.1121	114.6	0.2498	0.1747	1.0810	469.7		22.0219	114.6	0.2408	0.1749	1.0816	469.0	170
180	44.8189	116.3	0.2526	0.1761	1.0803	473.2		22.3763	116.3	0.2435	0.1763	1.0808	472.6	180
190	45.5186	118.1	0.2553	0.1775	1.0795	476.8		22.7289	118.1	0.2463	0.1777	1.0801	476.2	190
200	46.2243	119.9	0.2580	0.1789	1.0789	480.3		23.0814	119.9	0.2490	0.1790	1.0793	479.8	200
210	46.9263	121.7	0.2608	0.1803	1.0782	483.9		23.4331	121.7	0.2517	0.1804	1.0787	483.3	210
220	47.6324	123.5	0.2634	0.1816	1.0775	487.3		23.7881	123.5	0.2544	0.1817	1.0780	486.8	220
230	48.3367	125.3	0.2661	0.1830	1.0769	490.8		24.1397	125.3	0.2571	0.1831	1.0773	490.3	230
240	49.0460	127.2	0.2687	0.1843	1.0763	494.2		24.4944	127.1	0.2597	0.1844	1.0767	493.8	240
250	49.7462	129.0	0.2714	0.1856	1.0757	497.6		24.8454	129.0	0.2623	0.1857	1.0761	497.2	250
260	50.4472	130.9	0.2740	0.1869	1.0751	501.0		25.1979	130.8	0.2649	0.1870	1.0755	500.6	260
270	51.1510	132.8	0.2766	0.1882	1.0746	504.4		25.5531	132.7	0.2675	0.1882	1.0750	504.0	270
280	51.8570	134.6	0.2791	0.1894	1.0740	507.7		25.9025	134.6	0.2701	0.1895	1.0744	507.3	280
290	—	—	—	—	—	—		26.2548	136.5	0.2726	0.1907	1.0739	510.7	290
300	—	—	—	—	—	—		26.6069	138.4	0.2752	0.1919	1.0734	514.0	300
310	—	—	—	—	—	—		26.9600	140.3	0.2777	0.1931	1.0729	517.3	310

PRESSURE = 3.00 PSIA							PRESSURE = 4.00 PSIA							TEMP
TEMP °F	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	°F
14.49	0.0104	10.5	0.0236	0.1982	1.4804	2726.6	SAT LIQ	0.0105	12.7	0.0281	0.2048	1.4659	2633.1	25.3
14.49	10.9227	88.9	0.1889	0.1550	1.1043	406.3	SAT VAP	8.3529	90.5	0.1885	0.1577	1.1044	409.6	25.3
20	11.0592	89.8	0.1907	0.1555	1.1029	408.7		—	—	—	—	—	—	20
30	11.3054	91.3	0.1939	0.1565	1.1005	413.1		8.4410	91.2	0.1900	0.1581	1.1031	411.7	30
40	11.5500	92.9	0.1971	0.1577	1.0984	417.4		8.6272	92.8	0.1932	0.1590	1.1006	416.1	40
50	11.7932	94.5	0.2002	0.1588	1.0964	421.6		8.8121	94.4	0.1963	0.1600	1.0984	420.4	50
60	12.0352	96.1	0.2033	0.1601	1.0947	425.8		8.9957	96.0	0.1995	0.1610	1.0964	424.6	60
70	12.2762	97.7	0.2064	0.1614	1.0931	429.9		9.1784	97.6	0.2025	0.1622	1.0946	428.8	70
80	12.5164	99.3	0.2094	0.1627	1.0917	433.9		9.3602	99.2	0.2056	0.1634	1.0929	432.9	80
90	12.7559	100.9	0.2124	0.1640	1.0903	437.9		9.5413	100.9	0.2086	0.1646	1.0914	436.9	90
100	12.9948	102.6	0.2154	0.1654	1.0891	441.9		9.7217	102.5	0.2116	0.1659	1.0901	440.9	100
110	13.2332	104.3	0.2183	0.1667	1.0879	445.8		9.9017	104.2	0.2145	0.1672	1.0888	444.9	110
120	13.4712	105.9	0.2213	0.1681	1.0868	449.6		10.0812	105.9	0.2174	0.1685	1.0876	448.8	120
130	13.7088	107.6	0.2241	0.1695	1.0858	453.4		10.2603	107.6	0.2203	0.1698	1.0865	452.7	130
140	13.9470	109.3	0.2270	0.1709	1.0848	457.2		10.4392	109.3	0.2232	0.1712	1.0855	456.5	140
150	14.1829	111.0	0.2298	0.1723	1.0839	461.0		10.6184	111.0	0.2261	0.1725	1.0845	460.3	150
160	14.4193	112.8	0.2327	0.1737	1.0830	464.7		10.7963	112.7	0.2289	0.1739	1.0836	464.0	160
170	14.6579	114.5	0.2355	0.1750	1.0821	468.4		10.9738	114.5	0.2317	0.1752	1.0827	467.7	170
180	14.8930	116.3	0.2382	0.1764	1.0813	472.0		11.1515	116.2	0.2344	0.1766	1.0819	471.4	180
190	15.1304	118.0	0.2410	0.1778	1.0806	475.6		11.3298	118.0	0.2372	0.1779	1.0811	475.0	190
200	15.3649	119.8	0.2437	0.1791	1.0798	479.2		11.5076	119.8	0.2399	0.1793	1.0803	478.6	200
210	15.6021	121.6	0.2464	0.1805	1.0791	482.8		11.6851	121.6	0.2426	0.1806	1.0796	482.2	210
220	15.8369	123.4	0.2491	0.1818	1.0784	486.3		11.8626	123.4	0.2453	0.1819	1.0789	485.8	220
230	16.0740	125.3	0.2517	0.1831	1.0778	489.8		12.0392	125.2	0.2480	0.1832	1.0782	489.3	230
240	16.3105	127.1	0.2544	0.1845	1.0771	493.3		12.2187	127.1	0.2506	0.1845	1.0776	492.8	240
250	16.5439	128.9	0.2570	0.1857	1.0765	496.7		12.3950	128.9	0.2532	0.1858	1.0769	496.3	250
260	16.7800	130.8	0.2596	0.1870	1.0759	500.2		12.5732	130.8	0.2559	0.1871	1.0763	499.7	260
270	17.0172	132.7	0.2622	0.1883	1.0754	503.6		12.7505	132.6	0.2584	0.1883	1.0758	503.1	270
280	17.2539	134.6	0.2648	0.1895	1.0748	506.9		12.9275	134.5	0.2610	0.1896	1.0752	506.5	280
290	17.4865	136.5	0.2673	0.1908	1.0743	510.3		13.1048	136.4	0.2636	0.1908	1.0746	509.9	290
300	17.7249	138.4	0.2699	0.1920	1.0737	513.6		13.2801	138.4	0.2661	0.1920	1.0741	513.3	300
310	17.9597	140.3	0.2724	0.1932	1.0732	516.9		13.4595	140.3	0.2686	0.1932	1.0736	516.6	310
320	18.1941	142.3	0.2749	0.1944	1.0727	520.2		13.6349	142.2	0.2711	0.1944	1.0731	519.9	320
330	—	—	—	—	—	—		13.8128	144.2	0.2736	0.1956	1.0726	523.2	330

Table 2 (continued)
HCFC-123 Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
 Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

TEMP °F	PRESSURE = 32.00 PSIA							PRESSURE = 33.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
124.17	0.0115	35.8	0.0713	0.2558	1.4337	1985.3	SAT LIQ SAT VAP	0.0115	36.3	0.0721	0.2563	1.4341	1973.6	125.99
124.17	1.1873	104.8	0.1894	0.1823	1.1175	425.7		1.1530	105.1	0.1895	0.1827	1.1180	425.7	125.99
130	1.2028	105.9	0.1913	0.1819	1.1148	428.7		1.1634	105.8	0.1908	0.1824	1.1162	427.8	130
140	1.2290	107.7	0.1943	0.1815	1.1109	433.8		1.1889	107.6	0.1938	0.1819	1.1121	433.0	140
150	1.2548	109.5	0.1973	0.1814	1.1076	438.8		1.2141	109.5	0.1968	0.1817	1.1086	438.0	150
160	1.2802	111.3	0.2003	0.1815	1.1047	443.6		1.2389	111.3	0.1998	0.1818	1.1056	442.9	160
170	1.3053	113.2	0.2032	0.1817	1.1022	448.4		1.2633	113.1	0.2027	0.1820	1.1030	447.6	170
180	1.3302	115.0	0.2060	0.1822	1.1000	453.0		1.2876	114.9	0.2056	0.1824	1.1007	452.3	180
190	1.3549	116.8	0.2089	0.1827	1.0980	457.5		1.3116	116.8	0.2084	0.1830	1.0987	456.8	190
200	1.3794	118.6	0.2117	0.1834	1.0963	461.9		1.3355	118.6	0.2112	0.1836	1.0969	461.3	200
210	1.4038	120.5	0.2144	0.1842	1.0947	466.3		1.3592	120.4	0.2140	0.1844	1.0953	465.7	210
220	1.4280	122.3	0.2172	0.1850	1.0933	470.6		1.3828	122.3	0.2167	0.1852	1.0939	470.0	220
230	1.4521	124.2	0.2199	0.1860	1.0920	474.8		1.4064	124.1	0.2194	0.1861	1.0925	474.3	230
240	1.4763	126.0	0.2226	0.1869	1.0908	479.0		1.4296	126.0	0.2221	0.1870	1.0913	478.5	240
250	1.5003	127.9	0.2252	0.1879	1.0897	483.1		1.4530	127.9	0.2248	0.1880	1.0902	482.6	250
260	1.5241	129.8	0.2279	0.1889	1.0887	487.2		1.4761	129.8	0.2274	0.1890	1.0891	486.7	260
270	1.5478	131.7	0.2305	0.1900	1.0877	491.2		1.4994	131.6	0.2300	0.1901	1.0881	490.8	270
280	1.5719	133.6	0.2331	0.1911	1.0868	495.2		1.5225	133.6	0.2326	0.1911	1.0872	494.8	280
290	1.5954	135.5	0.2356	0.1922	1.0859	499.1		1.5456	135.5	0.2352	0.1922	1.0863	498.7	290
300	1.6192	137.4	0.2382	0.1933	1.0851	503.0		1.5688	137.4	0.2378	0.1933	1.0855	502.6	300
310	1.6430	139.4	0.2407	0.1944	1.0843	506.9		1.5917	139.3	0.2403	0.1944	1.0847	506.5	310
320	1.6665	141.3	0.2432	0.1955	1.0835	510.7		1.6147	141.3	0.2428	0.1955	1.0839	510.3	320
330	1.6901	143.3	0.2457	0.1966	1.0828	514.5		1.6375	143.2	0.2453	0.1966	1.0832	514.1	330
340	1.7136	145.3	0.2482	0.1977	1.0821	518.2		1.6606	145.2	0.2478	0.1978	1.0825	517.9	340
350	1.7372	147.2	0.2507	0.1988	1.0814	521.9		1.6833	147.2	0.2503	0.1989	1.0818	521.6	350
360	1.7608	149.2	0.2531	0.1999	1.0807	525.6		1.7063	149.2	0.2527	0.1999	1.0811	525.3	360
370	1.7843	151.2	0.2556	0.2010	1.0801	529.2		1.7291	151.2	0.2551	0.2010	1.0804	529.0	370
380	1.8077	153.2	0.2580	0.2021	1.0794	532.8		1.7519	153.2	0.2575	0.2021	1.0798	532.6	380
390	1.8313	155.3	0.2604	0.2031	1.0788	536.4		1.7747	155.2	0.2599	0.2032	1.0792	536.2	390
400	1.8545	157.3	0.2628	0.2042	1.0782	539.9		1.7973	157.3	0.2623	0.2042	1.0785	539.7	400
410	1.8782	159.4	0.2651	0.2052	1.0776	543.5		1.8202	159.3	0.2647	0.2052	1.0779	543.3	410
420	1.9016	161.4	0.2675	0.2062	1.0771	547.0		1.8428	161.4	0.2671	0.2063	1.0774	546.8	420
430	1.9246	163.5	0.2698	0.2072	1.0765	550.4		1.8658	163.5	0.2694	0.2073	1.0768	550.2	430

TEMP °F	PRESSURE = 34.00 PSIA							PRESSURE = 35.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
127.77	0.0115	36.8	0.0728	0.2568	1.4345	1962.1	SAT LIQ SAT VAP	0.0116	37.2	0.0736	0.2573	1.4350	1950.8	129.51
127.77	1.1206	105.4	0.1896	0.1832	1.1186	425.7		1.0900	105.6	0.1897	0.1836	1.1192	425.6	129.51
130	1.1263	105.8	0.1903	0.1830	1.1176	426.8		1.0912	105.7	0.1898	0.1835	1.1190	425.9	130
140	1.1512	107.6	0.1934	0.1824	1.1133	432.1		1.1156	107.5	0.1929	0.1829	1.1145	431.2	140
150	1.1758	109.4	0.1964	0.1821	1.1097	437.2		1.1396	109.4	0.1959	0.1825	1.1108	436.3	150
160	1.1999	111.2	0.1994	0.1821	1.1066	442.1		1.1633	111.2	0.1989	0.1825	1.1075	441.3	160
170	1.2238	113.1	0.2023	0.1823	1.1039	446.9		1.1866	113.0	0.2018	0.1826	1.1047	446.2	170
180	1.2475	114.9	0.2051	0.1827	1.1015	451.6		1.2096	114.8	0.2047	0.1829	1.1023	450.9	180
190	1.2709	116.7	0.2080	0.1832	1.0994	456.2		1.2325	116.7	0.2076	0.1834	1.1002	455.5	190
200	1.2941	118.5	0.2108	0.1838	1.0976	460.7		1.2552	118.5	0.2104	0.1840	1.0983	460.0	200
210	1.3172	120.4	0.2136	0.1845	1.0959	465.1		1.2777	120.3	0.2131	0.1847	1.0966	464.5	210
220	1.3402	122.2	0.2163	0.1853	1.0944	469.5		1.3001	122.2	0.2159	0.1855	1.0950	468.9	220
230	1.3631	124.1	0.2190	0.1862	1.0931	473.7		1.3224	124.0	0.2186	0.1863	1.0936	473.2	230
240	1.3858	126.0	0.2217	0.1871	1.0918	478.0		1.3446	125.9	0.2213	0.1872	1.0924	477.5	240
250	1.4086	127.8	0.2244	0.1881	1.0907	482.1		1.3666	127.8	0.2239	0.1882	1.0912	481.6	250
260	1.4313	129.7	0.2270	0.1891	1.0896	486.3		1.3887	129.7	0.2266	0.1892	1.0901	485.8	260
270	1.4537	131.6	0.2296	0.1901	1.0886	490.3		1.4108	131.6	0.2292	0.1902	1.0891	489.9	270
280	1.4763	133.5	0.2322	0.1912	1.0877	494.3		1.4326	133.5	0.2318	0.1913	1.0881	493.9	280
290	1.4986	135.4	0.2348	0.1923	1.0868	498.3		1.4544	135.4	0.2344	0.1923	1.0872	497.9	290
300	1.5212	137.4	0.2373	0.1934	1.0859	502.3		1.4764	137.3	0.2369	0.1934	1.0863	501.9	300
310	1.5435	139.3	0.2399	0.1945	1.0851	506.1		1.4980	139.3	0.2395	0.1945	1.0855	505.8	310
320	1.5658	141.3	0.2424	0.1956	1.0843	510.0		1.5199	141.2	0.2420	0.1956	1.0847	509.7	320
330	1.5881	143.2	0.2449	0.1967	1.0836	513.8		1.5417	143.2	0.2445	0.1967	1.0839	513.5	330
340	1.6106	145.2	0.2474	0.1978	1.0828	517.6		1.5632	145.2	0.2470	0.1978	1.0832	517.3	340
350	1.6327	147.2	0.2498	0.1989	1.0821	521.3		1.5851	147.1	0.2494	0.1989	1.0825	521.0	350
360	1.6550	149.2	0.2523	0.2000	1.0814	525.0		1.6065	149.1	0.2519	0.2000	1.0818	524.8	360
370	1.6772	151.2	0.2547	0.2011	1.0808	528.7		1.6282	151.1	0.2543	0.2011	1.0811	528.4	370
380	1.6993	153.2	0.2571	0.2021	1.0801	532.3		1.6497	153.2	0.2567	0.2022	1.0805	532.1	380
390	1.7215	155.2	0.2595	0.2032	1.0795	536.0		1.6714	155.2	0.2591	0.2032	1.0798	535.7	390
400	1.7435	157.3	0.2619	0.2042	1.0789	539.5		1.6929	157.2	0.2615	0.2043	1.0792	539.3	400
410	1.7657	159.3	0.2643	0.2053	1.0783	543.1		1.7145	159.3	0.2639	0.2053	1.0786	542.9	410
420	1.7880	161.4	0.2666	0.2063	1.0777	546.6		1.7360	161.3	0.2662	0.2063	1.0780	546.4	420
430	1.8101	163.4	0.2690	0.2073	1.0771	550.1		1.7576	163.4	0.2686	0.2073	1.0774	549.9	430

**Table 2 (continued)
HCFC-123 Superheated Vapor—Constant Pressure Tables**

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
 Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

TEMP °F	PRESSURE = 60.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 65.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
164.15	0.0120	46.3	0.0885	0.2653	1.4467	1720.4		0.0121	47.8	0.0908	0.2664	1.4492	1682.6	169.7
164.15	0.6477	110.5	0.1915	0.1925	1.1355	422.8		0.5988	111.3	0.1918	0.1940	1.1391	421.9	169.7
170	0.6568	111.6	0.1932	0.1916	1.1319	426.4		0.5993	111.3	0.1919	0.1939	1.1389	422.1	170
180	0.6721	113.6	0.1963	0.1906	1.1265	432.3		0.6138	113.3	0.1949	0.1925	1.1326	428.3	180
190	0.6870	115.5	0.1992	0.1899	1.1219	438.0		0.6279	115.2	0.1979	0.1915	1.1273	434.3	190
200	0.7017	117.4	0.2021	0.1895	1.1181	443.6		0.6418	117.1	0.2008	0.1909	1.1229	440.1	200
210	0.7162	119.2	0.2050	0.1894	1.1148	448.9		0.6555	119.0	0.2037	0.1906	1.1191	445.6	210
220	0.7304	121.1	0.2078	0.1895	1.1119	454.1		0.6689	120.9	0.2065	0.1905	1.1158	451.0	220
230	0.7446	123.0	0.2105	0.1898	1.1094	459.2		0.6822	122.8	0.2093	0.1907	1.1130	456.3	230
240	0.7586	124.9	0.2133	0.1903	1.1071	464.2		0.6953	124.7	0.2120	0.1910	1.1105	461.4	240
250	0.7725	126.8	0.2160	0.1908	1.1051	469.0		0.7084	126.6	0.2147	0.1915	1.1083	466.4	250
260	0.7862	128.8	0.2186	0.1915	1.1034	473.8		0.7213	128.6	0.2174	0.1921	1.1063	471.3	260
270	0.8001	130.7	0.2213	0.1923	1.1017	478.5		0.7342	130.5	0.2201	0.1927	1.1045	476.2	270
280	0.8137	132.6	0.2239	0.1931	1.1002	483.1		0.7469	132.4	0.2227	0.1935	1.1029	480.9	280
290	0.8273	134.5	0.2265	0.1940	1.0988	487.7		0.7597	134.4	0.2253	0.1944	1.1013	485.6	290
300	0.8409	136.5	0.2291	0.1949	1.0975	492.2		0.7724	136.3	0.2279	0.1953	1.0999	490.1	300
310	0.8544	138.4	0.2316	0.1959	1.0963	496.6		0.7849	138.3	0.2304	0.1962	1.0986	494.7	310
320	0.8677	140.4	0.2342	0.1969	1.0952	500.9		0.7975	140.2	0.2330	0.1972	1.0974	499.1	320
330	0.8811	142.4	0.2367	0.1979	1.0941	505.2		0.8101	142.2	0.2355	0.1982	1.0962	503.5	330
340	0.8946	144.4	0.2392	0.1989	1.0930	509.4		0.8225	144.2	0.2380	0.1992	1.0951	507.8	340
350	0.9080	146.4	0.2417	0.2000	1.0920	513.6		0.8349	146.2	0.2405	0.2002	1.0940	512.1	350
360	0.9212	148.4	0.2441	0.2011	1.0911	517.8		0.8473	148.2	0.2429	0.2013	1.0930	516.3	360
370	0.9345	150.4	0.2466	0.2021	1.0901	521.9		0.8598	150.2	0.2454	0.2023	1.0920	520.5	370
380	0.9477	152.4	0.2490	0.2032	1.0892	525.9		0.8722	152.2	0.2478	0.2034	1.0911	524.6	380
390	0.9611	154.4	0.2514	0.2042	1.0883	529.9		0.8845	154.3	0.2502	0.2044	1.0901	528.7	390
400	0.9742	156.5	0.2538	0.2053	1.0875	533.8		0.8967	156.3	0.2526	0.2055	1.0892	532.7	400
410	0.9874	158.5	0.2562	0.2063	1.0867	537.7		0.9091	158.4	0.2550	0.2065	1.0883	536.7	410
420	1.0006	160.6	0.2586	0.2073	1.0858	541.6		0.9213	160.5	0.2574	0.2075	1.0875	540.6	420
430	1.0137	162.7	0.2609	0.2083	1.0850	545.4		0.9336	162.5	0.2597	0.2085	1.0866	544.5	430
440	1.0267	164.8	0.2632	0.2093	1.0843	549.2		0.9458	164.6	0.2621	0.2095	1.0858	548.3	440
450	1.0399	166.9	0.2656	0.2103	1.0835	552.9		0.9579	166.7	0.2644	0.2105	1.0850	552.1	450
460	1.0529	169.0	0.2679	0.2113	1.0827	556.6		0.9701	168.8	0.2667	0.2115	1.0842	555.9	460
470	1.0660	171.1	0.2702	0.2122	1.0820	560.3		0.9822	171.0	0.2690	0.2125	1.0834	559.6	470

TEMP °F	PRESSURE = 70.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 75.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
174.93	0.0122	49.2	0.0930	0.2673	1.4516	1646.8		0.0123	50.5	0.0951	0.2682	1.4541	1612.7	179.89
174.93	0.5567	112.0	0.1920	0.1955	1.1428	420.9		0.5200	112.7	0.1923	0.1969	1.1467	419.9	179.89
180	0.5637	113.0	0.1936	0.1946	1.1392	424.2		0.5201	112.7	0.1924	0.1969	1.1466	419.9	180
190	0.5772	114.9	0.1966	0.1932	1.1331	430.5		0.5331	114.7	0.1954	0.1951	1.1394	426.5	190
200	0.5904	116.9	0.1996	0.1923	1.1280	436.5		0.5457	116.6	0.1984	0.1939	1.1335	432.8	200
210	0.6033	118.8	0.2024	0.1918	1.1237	442.3		0.5581	118.5	0.2013	0.1931	1.1286	438.8	210
220	0.6161	120.7	0.2053	0.1916	1.1200	447.9		0.5702	120.5	0.2041	0.1927	1.1244	444.7	220
230	0.6286	122.6	0.2081	0.1916	1.1168	453.3		0.5822	122.4	0.2070	0.1925	1.1208	450.3	230
240	0.6411	124.5	0.2108	0.1918	1.1140	458.6		0.5940	124.3	0.2097	0.1926	1.1177	455.8	240
250	0.6534	126.5	0.2136	0.1921	1.1115	463.8		0.6056	126.3	0.2125	0.1928	1.1149	461.1	250
260	0.6656	128.4	0.2163	0.1926	1.1093	468.8		0.6172	128.2	0.2152	0.1933	1.1125	466.3	260
270	0.6777	130.3	0.2189	0.1933	1.1074	473.8		0.6287	130.1	0.2178	0.1938	1.1103	471.4	270
280	0.6897	132.2	0.2216	0.1940	1.1056	478.6		0.6401	132.1	0.2205	0.1944	1.1084	476.4	280
290	0.7016	134.2	0.2242	0.1948	1.1039	483.4		0.6514	134.0	0.2231	0.1952	1.1066	481.3	290
300	0.7135	136.1	0.2267	0.1956	1.1024	488.1		0.6626	136.0	0.2257	0.1960	1.1050	486.1	300
310	0.7255	138.1	0.2293	0.1965	1.1010	492.7		0.6738	137.9	0.2282	0.1969	1.1034	490.8	310
320	0.7372	140.1	0.2319	0.1975	1.0997	497.3		0.6850	139.9	0.2308	0.1978	1.1020	495.5	320
330	0.7490	142.0	0.2344	0.1984	1.0984	501.8		0.6961	141.9	0.2333	0.1987	1.1007	500.0	330
340	0.7607	144.0	0.2369	0.1995	1.0972	506.2		0.7071	143.9	0.2358	0.1997	1.0994	504.6	340
350	0.7724	146.0	0.2394	0.2005	1.0961	510.6		0.7181	145.9	0.2383	0.2007	1.0982	509.0	350
360	0.7840	148.0	0.2418	0.2015	1.0950	514.9		0.7291	147.9	0.2408	0.2017	1.0970	513.4	360
370	0.7956	150.1	0.2443	0.2025	1.0939	519.1		0.7401	149.9	0.2432	0.2028	1.0959	517.7	370
380	0.8072	152.1	0.2467	0.2036	1.0929	523.3		0.7510	151.9	0.2457	0.2038	1.0948	522.0	380
390	0.8188	154.1	0.2491	0.2046	1.0919	527.5		0.7620	154.0	0.2481	0.2048	1.0937	526.2	390
400	0.8304	156.2	0.2515	0.2057	1.0910	531.6		0.7728	156.0	0.2505	0.2059	1.0927	530.4	400
410	0.8420	158.3	0.2539	0.2067	1.0900	535.6		0.7837	158.1	0.2529	0.2069	1.0917	534.5	410
420	0.8534	160.3	0.2563	0.2077	1.0891	539.6		0.7945	160.2	0.2553	0.2079	1.0908	538.6	420
430	0.8648	162.4	0.2586	0.2087	1.0882	543.6		0.8052	162.3	0.2576	0.2090	1.0898	542.6	430
440	0.8763	164.5	0.2610	0.2097	1.0873	547.5		0.8160	164.4	0.2600	0.2100	1.0889	546.6	440
450	0.8877	166.6	0.2633	0.2107	1.0865	551.3		0.8268	166.5	0.2623	0.2110	1.0880	550.5	450
460	0.8991	168.7	0.2656	0.2117	1.0856	555.1		0.8375	168.6	0.2646	0.2119	1.0871	554.4	460
470	0.9104	170.8	0.2679	0.2127	1.0848	558.9		0.8481	170.7	0.2669	0.2129	1.0862	558.2	470
480	0.9217	173.0	0.2702	0.2136	1.0840	562.6		0.8588	172.8	0.2692	0.2138	1.0854	562.0	480

Table 2 (continued)
HCFC-123 Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

TEMP °F	PRESSURE = 100.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 110.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
201.52	0.0126	56.3	0.1040	0.2721	1.4671	1463.5		0.0128	58.4	0.1070	0.2736	1.4727	1411.5	209.04
201.52	0.3897	115.5	0.1935	0.2037	1.1674	414.1		0.3536	116.5	0.1939	0.2063	1.1765	411.6	209.04
210	0.3986	117.3	0.1961	0.2016	1.1592	420.5		0.3545	116.7	0.1942	0.2060	1.1754	412.4	210
220	0.4088	119.3	0.1991	0.1997	1.1512	427.5		0.3643	118.7	0.1973	0.2034	1.1649	420.1	220
230	0.4188	121.3	0.2020	0.1984	1.1446	434.3		0.3738	120.8	0.2002	0.2015	1.1565	427.4	230
240	0.4285	123.2	0.2048	0.1976	1.1391	440.8		0.3831	122.8	0.2031	0.2001	1.1496	434.4	240
250	0.4381	125.2	0.2076	0.1971	1.1345	447.0		0.3921	124.8	0.2059	0.1992	1.1438	441.0	250
260	0.4475	127.2	0.2104	0.1969	1.1305	453.0		0.4009	126.8	0.2087	0.1987	1.1388	447.4	260
270	0.4567	129.1	0.2131	0.1970	1.1270	458.9		0.4097	128.7	0.2115	0.1985	1.1346	453.6	270
280	0.4659	131.1	0.2158	0.1972	1.1239	464.5		0.4182	130.7	0.2142	0.1985	1.1310	459.6	280
290	0.4750	133.1	0.2184	0.1976	1.1212	470.1		0.4267	132.7	0.2168	0.1988	1.1277	465.4	290
300	0.4840	135.1	0.2211	0.1981	1.1187	475.5		0.4351	134.7	0.2195	0.1992	1.1248	471.1	300
310	0.4929	137.1	0.2237	0.1988	1.1165	480.8		0.4435	136.7	0.2221	0.1997	1.1222	476.6	310
320	0.5018	139.0	0.2262	0.1995	1.1145	486.0		0.4517	138.7	0.2247	0.2003	1.1199	482.1	320
330	0.5106	141.0	0.2288	0.2003	1.1126	491.1		0.4599	140.7	0.2272	0.2010	1.1177	487.4	330
340	0.5194	143.0	0.2313	0.2012	1.1108	496.1		0.4681	142.7	0.2297	0.2018	1.1157	492.6	340
350	0.5280	145.1	0.2338	0.2021	1.1091	501.0		0.4761	144.7	0.2323	0.2027	1.1138	497.7	350
360	0.5367	147.1	0.2363	0.2030	1.1076	505.8		0.4842	146.8	0.2348	0.2036	1.1120	502.7	360
370	0.5453	149.1	0.2388	0.2040	1.1061	510.6		0.4922	148.8	0.2372	0.2045	1.1104	507.6	370
380	0.5541	151.2	0.2412	0.2050	1.1046	515.3		0.5002	150.9	0.2397	0.2055	1.1087	512.5	380
390	0.5625	153.2	0.2436	0.2060	1.1032	519.9		0.5082	152.9	0.2421	0.2065	1.1072	517.2	390
400	0.5711	155.3	0.2461	0.2070	1.1019	524.4		0.5161	155.0	0.2445	0.2075	1.1057	521.9	400
410	0.5796	157.4	0.2485	0.2080	1.1006	528.9		0.5239	157.1	0.2469	0.2085	1.1043	526.5	410
420	0.5882	159.5	0.2508	0.2090	1.0993	533.3		0.5318	159.2	0.2493	0.2095	1.1029	531.1	420
430	0.5967	161.5	0.2532	0.2100	1.0981	537.6		0.5396	161.3	0.2517	0.2105	1.1016	535.6	430
440	0.6051	163.7	0.2556	0.2111	1.0969	541.9		0.5474	163.4	0.2541	0.2115	1.1003	540.0	440
450	0.6134	165.8	0.2579	0.2120	1.0958	546.2		0.5552	165.5	0.2564	0.2125	1.0990	544.3	450
460	0.6218	167.9	0.2602	0.2130	1.0946	550.3		0.5630	167.6	0.2587	0.2135	1.0977	548.6	460
470	0.6301	170.0	0.2625	0.2140	1.0935	554.4		0.5706	169.8	0.2611	0.2145	1.0965	552.9	470
480	0.6386	172.2	0.2648	0.2150	1.0924	558.5		0.5784	171.9	0.2634	0.2154	1.0953	557.0	480
490	0.6468	174.3	0.2671	0.2159	1.0914	562.5		0.5860	174.1	0.2656	0.2164	1.0942	561.2	490
500	0.6551	176.5	0.2694	0.2168	1.0903	566.5		0.5937	176.2	0.2679	0.2173	1.0930	565.2	500
510	0.6633	178.7	0.2716	0.2177	1.0893	570.4		0.6013	178.4	0.2702	0.2182	1.0919	569.2	510

TEMP °F	PRESSURE = 120.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 130.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
216.07	0.0129	60.3	0.1099	0.2751	1.4786	1363.0		0.0131	62.1	0.1125	0.2767	1.4849	1317.5	222.67
216.07	0.3233	117.4	0.1943	0.2090	1.1861	409.0		0.2975	118.2	0.1946	0.2117	1.1962	406.4	222.67
220	0.3270	118.2	0.1955	0.2077	1.1811	412.3		—	—	—	—	—	—	220
230	0.3361	120.2	0.1985	0.2050	1.1702	420.2		0.3040	119.7	0.1969	0.2091	1.1861	412.7	230
240	0.3450	122.3	0.2014	0.2030	1.1614	427.7		0.3126	121.8	0.1999	0.2064	1.1749	420.8	240
250	0.3536	124.3	0.2043	0.2016	1.1541	434.8		0.3209	123.8	0.2028	0.2044	1.1658	428.4	250
260	0.3620	126.3	0.2071	0.2008	1.1481	441.7		0.3290	125.9	0.2056	0.2031	1.1583	435.7	260
270	0.3703	128.3	0.2099	0.2002	1.1430	448.2		0.3369	127.9	0.2084	0.2022	1.1521	442.6	270
280	0.3784	130.3	0.2126	0.2000	1.1386	454.5		0.3446	129.9	0.2112	0.2017	1.1468	449.3	280
290	0.3864	132.3	0.2153	0.2000	1.1347	460.6		0.3522	131.9	0.2139	0.2015	1.1423	455.7	290
300	0.3943	134.3	0.2180	0.2003	1.1313	466.6		0.3598	133.9	0.2165	0.2015	1.1383	462.0	300
310	0.4022	136.3	0.2206	0.2007	1.1283	472.4		0.3671	136.0	0.2192	0.2017	1.1348	468.0	310
320	0.4099	138.3	0.2232	0.2012	1.1256	478.0		0.3745	138.0	0.2218	0.2021	1.1316	473.9	320
330	0.4176	140.4	0.2257	0.2018	1.1231	483.6		0.3818	140.0	0.2244	0.2027	1.1287	479.7	330
340	0.4252	142.4	0.2283	0.2026	1.1208	489.0		0.3889	142.0	0.2269	0.2033	1.1261	485.3	340
350	0.4328	144.4	0.2308	0.2034	1.1187	494.3		0.3961	144.1	0.2295	0.2041	1.1237	490.8	350
360	0.4404	146.4	0.2333	0.2042	1.1167	499.5		0.4032	146.1	0.2320	0.2049	1.1215	496.2	360
370	0.4478	148.5	0.2358	0.2051	1.1148	504.6		0.4103	148.2	0.2345	0.2057	1.1194	501.5	370
380	0.4553	150.5	0.2383	0.2060	1.1130	509.6		0.4173	150.2	0.2369	0.2066	1.1174	506.7	380
390	0.4627	152.6	0.2407	0.2070	1.1113	514.5		0.4243	152.3	0.2394	0.2075	1.1155	511.8	390
400	0.4701	154.7	0.2431	0.2080	1.1097	519.4		0.4312	154.4	0.2418	0.2085	1.1137	516.8	400
410	0.4775	156.8	0.2455	0.2090	1.1081	524.1		0.4382	156.5	0.2442	0.2095	1.1120	521.7	410
420	0.4848	158.9	0.2479	0.2100	1.1066	528.8		0.4450	158.6	0.2466	0.2105	1.1103	526.5	420
430	0.4921	161.0	0.2503	0.2110	1.1051	533.4		0.4519	160.7	0.2490	0.2115	1.1087	531.3	430
440	0.4994	163.1	0.2527	0.2120	1.1037	538.0		0.4587	162.8	0.2514	0.2124	1.1071	536.0	440
450	0.5066	165.2	0.2550	0.2130	1.1023	542.5		0.4655	164.9	0.2537	0.2134	1.1056	540.6	450
460	0.5139	167.3	0.2574	0.2139	1.1009	546.9		0.4722	167.1	0.2561	0.2144	1.1041	545.1	460
470	0.5211	169.5	0.2597	0.2149	1.0996	551.2		0.4790	169.2	0.2584	0.2154	1.1027	549.6	470
480	0.5281	171.6	0.2620	0.2159	1.0983	555.5		0.4857	171.4	0.2607	0.2163	1.1013	554.0	480
490	0.5353	173.8	0.2643	0.2168	1.0970	559.7		0.4924	173.5	0.2630	0.2173	1.0999	558.3	490
500	0.5424	176.0	0.2665	0.2178	1.0958	563.9		0.4990	175.7	0.2653	0.2182	1.0986	562.6	500
510	0.5495	178.2	0.2688	0.2187	1.0946	568.0		0.5057	177.9	0.2675	0.2191	1.0973	566.8	510
520	0.5566	180.4	0.2711	0.2196	1.0934	572.1		0.5123	180.1	0.2698	0.2200	1.0960	570.9	520
530	—	—	—	—	—	—		0.5189	182.3	0.2720	0.2209	1.0947	575.0	530

Table 2 (continued)
HCFC-123 Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

TEMP °F	PRESSURE = 180.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 190.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
250.97	0.0137	70.0	0.1237	0.2857	1.5230	1123.1		0.0139	71.4	0.1256	0.2879	1.5323	1089.3	255.9
250.97	0.2100	121.3	0.1959	0.2265	1.2560	392.2		0.1978	121.8	0.1960	0.2298	1.2702	389.2	255.9
260	0.2167	123.4	0.1987	0.2211	1.2347	401.7		0.2009	122.8	0.1973	0.2268	1.2585	393.8	260
270	0.2238	125.5	0.2017	0.2167	1.2166	411.4		0.2079	125.0	0.2004	0.2212	1.2355	404.4	270
280	0.2306	127.7	0.2046	0.2136	1.2025	420.5		0.2146	127.2	0.2034	0.2171	1.2180	414.0	280
290	0.2371	129.8	0.2075	0.2114	1.1912	428.9		0.2211	129.4	0.2063	0.2143	1.2042	423.0	290
300	0.2434	131.9	0.2103	0.2099	1.1820	437.0		0.2273	131.5	0.2091	0.2123	1.1932	431.5	300
310	0.2496	134.0	0.2130	0.2090	1.1742	444.6		0.2333	133.6	0.2119	0.2109	1.1841	439.5	310
320	0.2556	136.1	0.2157	0.2084	1.1677	451.9		0.2392	135.7	0.2146	0.2100	1.1765	447.2	320
330	0.2616	138.2	0.2184	0.2081	1.1620	459.0		0.2450	137.8	0.2173	0.2095	1.1700	454.6	330
340	0.2674	140.3	0.2210	0.2081	1.1570	465.8		0.2507	139.9	0.2199	0.2094	1.1643	461.7	340
350	0.2732	142.4	0.2236	0.2084	1.1526	472.4		0.2563	142.0	0.2225	0.2094	1.1593	468.5	350
360	0.2789	144.4	0.2261	0.2088	1.1487	478.9		0.2618	144.1	0.2251	0.2097	1.1548	475.2	360
370	0.2845	146.5	0.2287	0.2093	1.1450	485.1		0.2673	146.2	0.2277	0.2101	1.1508	481.7	370
380	0.2901	148.6	0.2312	0.2099	1.1417	491.2		0.2726	148.3	0.2302	0.2107	1.1471	487.9	380
390	0.2956	150.7	0.2337	0.2106	1.1386	497.2		0.2780	150.4	0.2327	0.2114	1.1437	494.1	390
400	0.3012	152.8	0.2361	0.2114	1.1357	503.0		0.2833	152.5	0.2351	0.2121	1.1405	500.1	400
410	0.3066	155.0	0.2386	0.2123	1.1330	508.7		0.2885	154.6	0.2376	0.2129	1.1376	505.9	410
420	0.3120	157.1	0.2410	0.2132	1.1304	514.3		0.2937	156.8	0.2400	0.2138	1.1348	511.7	420
430	0.3174	159.2	0.2434	0.2141	1.1280	519.7		0.2989	158.9	0.2425	0.2146	1.1321	517.3	430
440	0.3227	161.4	0.2458	0.2150	1.1256	525.1		0.3040	161.1	0.2449	0.2155	1.1296	522.8	440
450	0.3281	163.5	0.2482	0.2159	1.1234	530.3		0.3092	163.2	0.2473	0.2165	1.1271	528.1	450
460	0.3333	165.7	0.2506	0.2169	1.1212	535.5		0.3142	165.4	0.2496	0.2174	1.1248	533.4	460
470	0.3385	167.9	0.2529	0.2178	1.1191	540.5		0.3193	167.6	0.2520	0.2184	1.1225	538.6	470
480	0.3438	170.0	0.2553	0.2188	1.1171	545.5		0.3243	169.8	0.2543	0.2193	1.1204	543.7	480
490	0.3489	172.2	0.2576	0.2197	1.1151	550.4		0.3293	172.0	0.2567	0.2202	1.1183	548.6	490
500	0.3541	174.4	0.2599	0.2207	1.1132	555.1		0.3343	174.2	0.2590	0.2212	1.1162	553.5	500
510	0.3593	176.6	0.2622	0.2216	1.1113	559.8		0.3391	176.4	0.2613	0.2221	1.1142	558.3	510
520	0.3644	178.9	0.2645	0.2225	1.1095	564.5		0.3441	178.6	0.2635	0.2230	1.1123	563.1	520
530	0.3695	181.1	0.2667	0.2234	1.1077	569.0		0.3489	180.9	0.2658	0.2239	1.1104	567.7	530
540	0.3745	183.3	0.2690	0.2243	1.1060	573.5		0.3538	183.1	0.2681	0.2248	1.1086	572.3	540
550	0.3795	185.6	0.2712	0.2251	1.1043	577.9		0.3586	185.3	0.2703	0.2256	1.1068	576.7	550
560	0.3845	187.8	0.2734	0.2259	1.1027	582.2		0.3634	187.6	0.2725	0.2265	1.1050	581.1	560

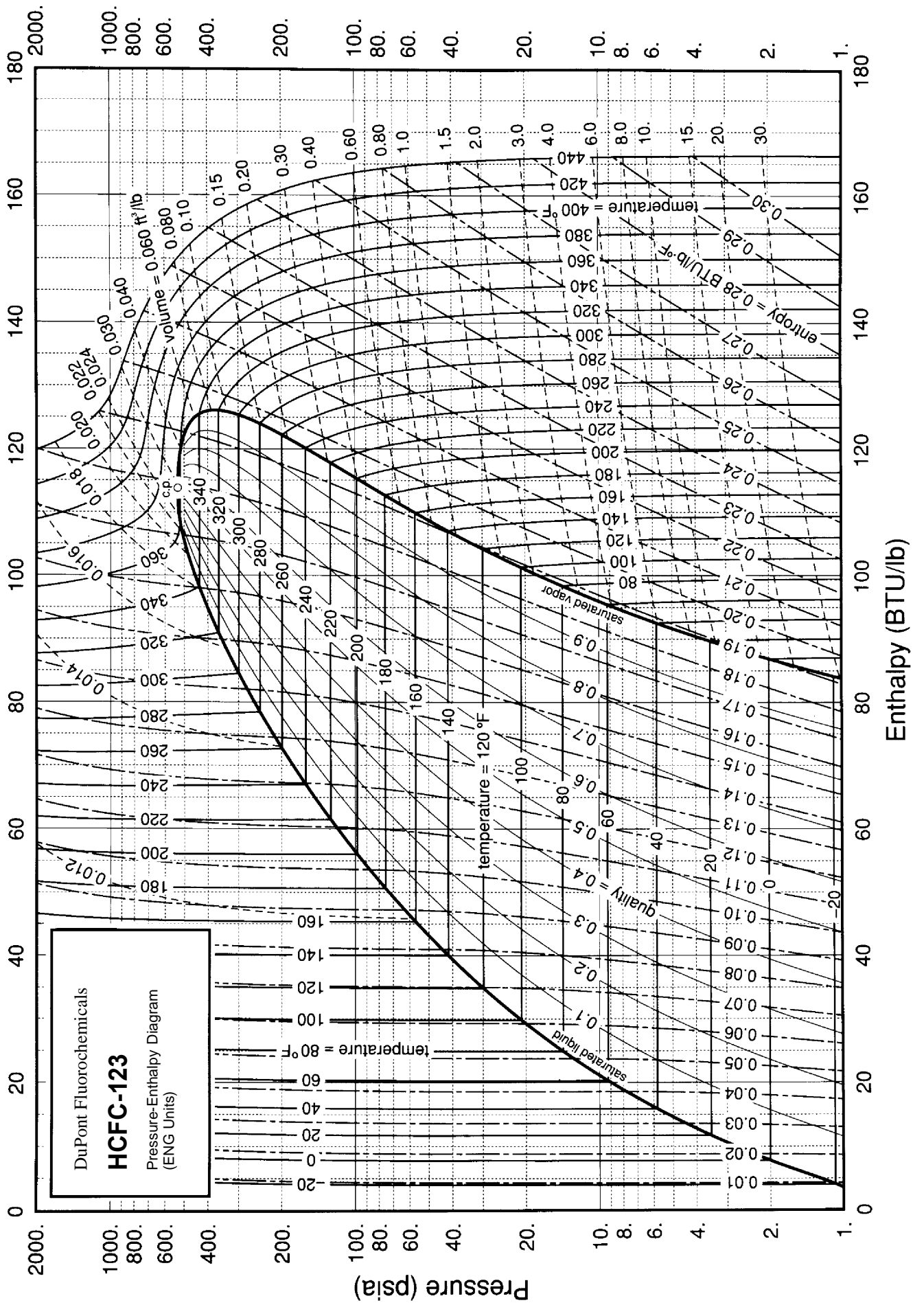
TEMP °F	PRESSURE = 200.00 PSIA						SAT LIQ SAT VAP	PRESSURE = 220.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
260.64	0.0140	72.8	0.1275	0.2902	1.5423	1056.7		0.0142	75.4	0.1310	0.2954	1.5644	994.6	269.63
260.64	0.1868	122.3	0.1962	0.2332	1.2852	386.2		0.1676	123.1	0.1965	0.2408	1.3183	379.9	269.63
270	0.1934	124.5	0.1992	0.2264	1.2577	396.9		0.1679	123.2	0.1966	0.2404	1.3167	380.4	270
280	0.2001	126.7	0.2022	0.2212	1.2357	407.3		0.1747	125.6	0.1998	0.2316	1.2806	392.7	280
290	0.2065	128.9	0.2052	0.2175	1.2189	416.9		0.1811	127.9	0.2028	0.2255	1.2546	403.8	290
300	0.2127	131.0	0.2080	0.2149	1.2056	425.8		0.1871	130.1	0.2058	0.2212	1.2350	413.9	300
310	0.2186	133.2	0.2108	0.2130	1.1949	434.3		0.1929	132.3	0.2087	0.2181	1.2197	423.3	310
320	0.2244	135.3	0.2136	0.2118	1.1859	442.3		0.1985	134.5	0.2115	0.2160	1.2074	432.2	320
330	0.2300	137.4	0.2162	0.2111	1.1784	450.0		0.2040	136.6	0.2142	0.2146	1.1973	440.6	330
340	0.2355	139.5	0.2189	0.2107	1.1719	457.4		0.2093	138.8	0.2169	0.2137	1.1888	448.6	340
350	0.2410	141.6	0.2215	0.2106	1.1663	464.5		0.2144	140.9	0.2196	0.2132	1.1815	456.3	350
360	0.2463	143.7	0.2241	0.2107	1.1613	471.4		0.2196	143.0	0.2222	0.2130	1.1752	463.7	360
370	0.2516	145.9	0.2267	0.2110	1.1568	478.1		0.2246	145.2	0.2248	0.2130	1.1696	470.8	370
380	0.2568	148.0	0.2292	0.2115	1.1527	484.6		0.2295	147.3	0.2273	0.2133	1.1646	477.8	380
390	0.2620	150.1	0.2317	0.2121	1.1490	490.9		0.2344	149.4	0.2298	0.2137	1.1601	484.5	390
400	0.2671	152.2	0.2342	0.2128	1.1455	497.1		0.2392	151.6	0.2324	0.2143	1.1559	491.0	400
410	0.2722	154.3	0.2366	0.2136	1.1423	503.1		0.2440	153.7	0.2348	0.2149	1.1521	497.4	410
420	0.2773	156.5	0.2391	0.2144	1.1392	509.0		0.2487	155.9	0.2373	0.2157	1.1485	503.6	420
430	0.2823	158.6	0.2415	0.2152	1.1363	514.8		0.2534	158.0	0.2397	0.2165	1.1452	509.6	430
440	0.2872	160.8	0.2439	0.2161	1.1336	520.4		0.2581	160.2	0.2422	0.2173	1.1420	515.5	440
450	0.2922	162.9	0.2463	0.2170	1.1310	525.9		0.2627	162.4	0.2446	0.2182	1.1390	521.3	450
460	0.2970	165.1	0.2487	0.2180	1.1285	531.3		0.2673	164.6	0.2470	0.2191	1.1361	527.0	460
470	0.3019	167.3	0.2511	0.2189	1.1261	536.6		0.2719	166.8	0.2493	0.2200	1.1333	532.5	470
480	0.3068	169.5	0.2534	0.2198	1.1237	541.8		0.2764	169.0	0.2517	0.2209	1.1307	538.0	480
490	0.3116	171.7	0.2557	0.2208	1.1215	546.9		0.2809	171.2	0.2540	0.2218	1.1281	543.3	490
500	0.3163	173.9	0.2581	0.2217	1.1193	551.9		0.2853	173.4	0.2564	0.2227	1.1256	548.5	500
510	0.3211	176.1	0.2604	0.2226	1.1172	556.8		0.2897	175.6	0.2587	0.2236	1.1233	553.6	510
520	0.3258	178.4	0.2627	0.2235	1.1151	561.6		0.2941	177.9	0.2610	0.2245	1.1209	558.5	520
530	0.3305	180.6	0.2649	0.2244	1.1131	566.3		0.2985	180.1	0.2633	0.2254	1.1187	563.5	530
540	0.3352	182.9	0.2672	0.2253	1.1112	571.0		0.3029	182.4	0.2655	0.2263	1.1165	568.4	540
550	0.3397	185.1	0.2694	0.2261	1.1093	575.6		0.3072	184.6	0.2678	0.2271	1.1144	573.1	550
560	0.3444	187.4	0.2717	0.2270	1.1074	580.0		0.3115	186.9	0.2700	0.2280	1.1123	577.7	560
570	0.3489	189.7	0.2739	0.2278	1.1057	584.4		0.3157	189.2	0.2723	0.2288	1.1103	582.3	570

Table 2 (continued)
HCFC-123 Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in Btu/lb S = Entropy in Btu/(lb) (°R) v_s = Velocity of Sound in ft/sec
 Cp = Heat Capacity at Constant Pressure in Btu/(lb) (°F) Cp/Cv = Heat Capacity Ratio (Dimensionless)

TEMP °F	PRESSURE = 400.00 PSIA							PRESSURE = 450.00 PSIA						TEMP °F
	V	H	S	Cp	Cp/Cv	vs		V	H	S	Cp	Cp/Cv	vs	
331	0.0173	94.8	0.1558	0.4165	2.0731	525.4	SAT LIQ	0.0187	99.8	0.1619	0.5495	2.6383	401.6	344.02
331	0.0756	126.0	0.1953	0.4230	2.1514	314.0	SAT VAP	0.0606	125.0	0.1933	0.6550	3.2074	294.3	344.02
340	0.0827	129.3	0.1994	0.3321	1.7421	338.3		—	—	—	—	—	—	340
350	0.0888	132.4	0.2033	0.2915	1.5597	358.6		0.0669	128.1	0.1971	0.4362	2.2168	316.1	350
360	0.0940	135.2	0.2067	0.2701	1.4619	375.3		0.0740	131.9	0.2017	0.3363	1.7659	341.4	360
370	0.0986	137.8	0.2099	0.2571	1.4003	389.8		0.0795	135.1	0.2056	0.2966	1.5853	360.9	370
380	0.1029	140.4	0.2129	0.2486	1.3577	402.8		0.0842	137.9	0.2090	0.2752	1.4858	377.2	380
390	0.1070	142.8	0.2158	0.2429	1.3263	414.7		0.0885	140.6	0.2121	0.2621	1.4221	391.7	390
400	0.1108	145.2	0.2187	0.2389	1.3021	425.8		0.0924	143.2	0.2152	0.2536	1.3776	404.7	400
410	0.1145	147.6	0.2214	0.2362	1.2827	436.2		0.0961	145.7	0.2181	0.2478	1.3446	416.7	410
420	0.1181	150.0	0.2241	0.2344	1.2667	446.0		0.0997	148.1	0.2209	0.2438	1.3189	427.8	420
430	0.1216	152.3	0.2267	0.2332	1.2532	455.4		0.1031	150.5	0.2236	0.2410	1.2983	438.4	430
440	0.1250	154.6	0.2293	0.2325	1.2415	464.4		0.1064	152.9	0.2263	0.2391	1.2812	448.3	440
450	0.1283	156.9	0.2319	0.2321	1.2313	473.0		0.1096	155.3	0.2289	0.2379	1.2667	457.8	450
460	0.1316	159.3	0.2344	0.2321	1.2222	481.2		0.1127	157.7	0.2315	0.2372	1.2542	466.9	460
470	0.1348	161.6	0.2370	0.2322	1.2140	489.3		0.1157	160.1	0.2341	0.2369	1.2431	475.7	470
480	0.1380	163.9	0.2394	0.2325	1.2065	497.0		0.1187	162.4	0.2366	0.2368	1.2333	484.1	480
490	0.1411	166.2	0.2419	0.2330	1.1996	504.5		0.1217	164.8	0.2391	0.2369	1.2243	492.3	490
500	0.1442	168.6	0.2443	0.2335	1.1932	511.8		0.1246	167.2	0.2416	0.2372	1.2161	500.2	500
510	0.1472	170.9	0.2468	0.2341	1.1872	518.9		0.1275	169.6	0.2441	0.2376	1.2086	507.8	510
520	0.1502	173.3	0.2492	0.2348	1.1816	525.7		0.1303	171.9	0.2465	0.2381	1.2016	515.2	520
530	0.1532	175.6	0.2516	0.2355	1.1762	532.4		0.1331	174.3	0.2489	0.2387	1.1950	522.4	530
540	0.1561	178.0	0.2539	0.2362	1.1712	538.9		0.1358	176.7	0.2513	0.2393	1.1889	529.4	540
550	0.1590	180.3	0.2563	0.2370	1.1664	545.3		0.1385	179.1	0.2537	0.2400	1.1830	536.2	550
560	0.1619	182.7	0.2586	0.2377	1.1618	551.5		0.1412	181.5	0.2561	0.2406	1.1775	542.9	560
570	0.1647	185.1	0.2610	0.2385	1.1574	557.5		0.1438	183.9	0.2584	0.2413	1.1722	549.3	570
580	0.1675	187.5	0.2633	0.2392	1.1532	563.4		0.1465	186.3	0.2608	0.2420	1.1672	555.6	580
590	0.1703	189.9	0.2656	0.2400	1.1492	569.2		0.1490	188.8	0.2631	0.2427	1.1624	561.7	590
600	0.1730	192.3	0.2678	0.2407	1.1453	574.8		0.1516	191.2	0.2654	0.2434	1.1579	567.7	600
610	0.1758	194.7	0.2701	0.2414	1.1416	580.2		0.1541	193.6	0.2677	0.2441	1.1535	573.5	610
620	0.1785	197.1	0.2723	0.2421	1.1380	585.6		0.1566	196.1	0.2700	0.2448	1.1492	579.2	620
630	0.1811	199.5	0.2746	0.2428	1.1345	590.8		0.1591	198.5	0.2722	0.2454	1.1452	584.7	630
640	0.1838	202.0	0.2768	0.2434	1.1311	595.9		0.1616	201.0	0.2745	0.2461	1.1413	590.1	640
650	—	—	—	—	—	—		0.1640	203.4	0.2767	0.2467	1.1375	595.4	650

TEMP °F	PRESSURE = 500.00 PSIA						
	V	H	S	Cp	Cp/Cv	vs	
355.77	0.0211	105.4	0.1686	1.2226	5.5444	282.1	SAT LIQ
355.77	0.0459	122.2	0.1891	1.8517	8.5085	276.8	SAT VAP
360	0.0536	126.4	0.1943	0.6687	3.2605	298.3	
370	0.0623	131.3	0.2003	0.3984	2.0485	328.1	
380	0.0681	134.9	0.2045	0.3283	1.7316	349.7	
390	0.0729	138.0	0.2082	0.2954	1.5801	367.4	
400	0.0772	140.8	0.2116	0.2765	1.4902	382.8	
410	0.0810	143.5	0.2147	0.2647	1.4304	396.6	
420	0.0846	146.1	0.2177	0.2568	1.3876	409.3	
430	0.0880	148.7	0.2205	0.2514	1.3551	421.0	
440	0.0912	151.2	0.2233	0.2477	1.3295	432.1	
450	0.0943	153.6	0.2260	0.2451	1.3087	442.5	
460	0.0974	156.1	0.2287	0.2434	1.2912	452.4	
470	0.1003	158.5	0.2313	0.2423	1.2763	462.0	
480	0.1032	160.9	0.2339	0.2416	1.2633	471.1	
490	0.1060	163.3	0.2365	0.2413	1.2517	479.9	
500	0.1088	165.8	0.2390	0.2412	1.2413	488.3	
510	0.1115	168.2	0.2415	0.2414	1.2319	496.5	
520	0.1142	170.6	0.2440	0.2416	1.2232	504.5	
530	0.1168	173.0	0.2464	0.2420	1.2152	512.2	
540	0.1194	175.4	0.2489	0.2425	1.2077	519.6	
550	0.1220	177.9	0.2513	0.2431	1.2007	526.9	
560	0.1245	180.3	0.2537	0.2437	1.1941	533.9	
570	0.1270	182.7	0.2561	0.2443	1.1879	540.8	
580	0.1295	185.2	0.2584	0.2449	1.1820	547.4	
590	0.1319	187.6	0.2608	0.2456	1.1764	553.9	
600	0.1343	190.1	0.2631	0.2462	1.1710	560.3	
610	0.1367	192.6	0.2654	0.2469	1.1659	566.4	
620	0.1391	195.0	0.2677	0.2475	1.1610	572.4	
630	0.1414	197.5	0.2700	0.2482	1.1563	578.3	
640	0.1437	200.0	0.2723	0.2488	1.1518	584.0	
650	0.1459	202.5	0.2745	0.2494	1.1475	589.6	
660	0.1482	205.0	0.2768	0.2500	1.1433	595.0	



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