DuPont™ ISCEON® 9 Series

REFRIGERANTS

Technical Information

Thermodynamic Properties of DuPont™ ISCEON® MO49*Plus*™

ENG Units

The miracles of science™

Thermodynamic Properties of DuPont™ ISCEON® MO49*Plus*™ Refrigerant (R-134a/R-125/R-600/R-601) – (78.5/19.5/1.4/0.6 by % weight)

Eng Units

Tables of thermodynamic properties of DuPont™ ISCEON® MO49*Plus*™ have been developed and are presented here. This information is based on values calculated using the NIST REFPROP database (McLinden, M.O., Klein, S.A., Lemmon, E.W., and Peskin, A.P., NIST standard Reference Database 23, NIST thermodynamic and transport properties of refrigerants and refrigerant mixture-REFPROP version 8.0, Standard Reference Data Program, National Institute of Standards and Technology, 2007.)

Units

P = Pressure in psia

T = Temperature in Fahrenheit

V_f = Fluid (liquid) specific volume in cubic feet per pound

V_g = Vapor (gas) specific volume in cubic feet per pound

d_f = Density of saturated vapor in pounds per cubic foot

d_g = Density of saturated liquid in pounds per cubic foot

h = Enthalpy (BTU/lb)

s = Entropy (BTU/lb·R)

Reference points for Enthalpy and Entropy:

h_f = 0 BTU/lb at –40°F

s_f = 0 BTU/lb·R at –40°F

Physical Properties

Chemical Formula	$CF_3CH_2F/CF_3CHF/C_4H_{10}/C_5H_{12}$ (78.5/19.5/1.4/0.6)	
Molecular Weight	g/mol	104
Boiling Point (1 atm)	°F	–20
Critical Temperature	°F	204.7
Critical Pressure	psia	594.1
Critical Density	lb/ft^3	32.0

Table 1
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
–150	0.14	0.09	0.0102	372.9392	97.88	0.0027	–32.4	108.3	75.9	–0.0893	0.2636	–150
–149	0.15	0.09	0.0102	352.3557	97.78	0.0028	–32.1	108.1	76.1	–0.0883	0.2629	–149
–148	0.16	0.10	0.0102	333.0583	97.68	0.0030	–31.8	108.0	76.2	–0.0874	0.2622	–148
–147	0.16	0.10	0.0102	314.9580	97.58	0.0032	–31.5	107.8	76.4	–0.0865	0.2615	–147
–146	0.17	0.11	0.0103	297.9726	97.48	0.0034	–31.2	107.7	76.5	–0.0855	0.2609	–146
–145	0.18	0.12	0.0103	282.0262	97.38	0.0035	–30.9	107.5	76.7	–0.0846	0.2602	–145
–144	0.19	0.12	0.0103	267.0482	97.28	0.0037	–30.6	107.4	76.8	–0.0836	0.2596	–144
–143	0.20	0.13	0.0103	252.9736	97.18	0.0040	–30.3	107.2	76.9	–0.0827	0.2589	–143
–142	0.22	0.14	0.0103	239.7420	97.09	0.0042	–30.0	107.1	77.1	–0.0818	0.2583	–142
–141	0.23	0.14	0.0103	227.2973	96.99	0.0044	–29.7	106.9	77.2	–0.0809	0.2576	–141
–140	0.24	0.15	0.0103	215.5875	96.89	0.0046	–29.4	106.8	77.4	–0.0799	0.2570	–140
–139	0.25	0.16	0.0103	204.5647	96.79	0.0049	–29.1	106.6	77.5	–0.0790	0.2564	–139
–138	0.26	0.17	0.0103	194.1838	96.69	0.0051	–28.8	106.5	77.7	–0.0781	0.2558	–138
–137	0.28	0.18	0.0104	184.4036	96.59	0.0054	–28.5	106.3	77.8	–0.0772	0.2552	–137
–136	0.29	0.19	0.0104	175.1852	96.49	0.0057	–28.2	106.2	77.9	–0.0763	0.2546	–136
–135	0.31	0.20	0.0104	166.4928	96.40	0.0060	–27.9	106.0	78.1	–0.0754	0.2540	–135
–134	0.32	0.21	0.0104	158.2931	96.30	0.0063	–27.7	105.9	78.2	–0.0745	0.2534	–134
–133	0.34	0.22	0.0104	150.5548	96.20	0.0066	–27.4	105.7	78.4	–0.0736	0.2529	–133
–132	0.36	0.24	0.0104	143.2492	96.10	0.0070	–27.1	105.6	78.5	–0.0727	0.2523	–132
–131	0.37	0.25	0.0104	136.3493	96.00	0.0073	–26.8	105.4	78.7	–0.0718	0.2517	–131
–130	0.39	0.26	0.0104	129.8299	95.91	0.0077	–26.5	105.3	78.8	–0.0709	0.2512	–130
–129	0.41	0.28	0.0104	123.6677	95.81	0.0081	–26.2	105.1	79.0	–0.0701	0.2506	–129
–128	0.43	0.29	0.0104	117.8409	95.71	0.0085	–25.9	105.0	79.1	–0.0692	0.2501	–128
–127	0.45	0.31	0.0105	112.3290	95.61	0.0089	–25.6	104.9	79.2	–0.0683	0.2496	–127
–126	0.47	0.32	0.0105	107.1131	95.52	0.0093	–25.3	104.7	79.4	–0.0674	0.2490	–126
–125	0.50	0.34	0.0105	102.1753	95.42	0.0098	–25.0	104.6	79.5	–0.0665	0.2485	–125
–124	0.52	0.36	0.0105	97.4992	95.32	0.0103	–24.7	104.4	79.7	–0.0657	0.2480	–124
–123	0.54	0.37	0.0105	93.0693	95.22	0.0107	–24.4	104.3	79.8	–0.0648	0.2475	–123
–122	0.57	0.39	0.0105	88.8710	95.13	0.0113	–24.2	104.1	80.0	–0.0639	0.2470	–122
–121	0.60	0.41	0.0105	84.8907	95.03	0.0118	–23.9	104.0	80.1	–0.0631	0.2465	–121
–120	0.62	0.43	0.0105	81.1159	94.93	0.0123	–23.6	103.8	80.3	–0.0622	0.2460	–120
–119	0.65	0.45	0.0105	77.5346	94.83	0.0129	–23.3	103.7	80.4	–0.0614	0.2455	–119
–118	0.68	0.48	0.0106	74.1358	94.74	0.0135	–23.0	103.5	80.6	–0.0605	0.2450	–118
–117	0.71	0.50	0.0106	70.9089	94.64	0.0141	–22.7	103.4	80.7	–0.0597	0.2446	–117
–116	0.74	0.52	0.0106	67.8443	94.54	0.0147	–22.4	103.3	80.9	–0.0588	0.2441	–116
–115	0.78	0.55	0.0106	64.9328	94.44	0.0154	–22.1	103.1	81.0	–0.0580	0.2436	–115
–114	0.81	0.57	0.0106	62.1658	94.35	0.0161	–21.8	103.0	81.2	–0.0571	0.2432	–114
–113	0.85	0.60	0.0106	59.5352	94.25	0.0168	–21.5	102.8	81.3	–0.0563	0.2427	–113
–112	0.88	0.63	0.0106	57.0336	94.15	0.0175	–21.2	102.7	81.4	–0.0554	0.2423	–112
–111	0.92	0.66	0.0106	54.6537	94.05	0.0183	–20.9	102.5	81.6	–0.0546	0.2419	–111
–110	0.96	0.69	0.0106	52.3890	93.96	0.0191	–20.7	102.4	81.7	–0.0538	0.2414	–110
–109	1.00	0.72	0.0107	50.2332	93.86	0.0199	–20.4	102.3	81.9	–0.0529	0.2410	–109
–108	1.04	0.75	0.0107	48.1803	93.76	0.0208	–20.1	102.1	82.0	–0.0521	0.2406	–108
–107	1.09	0.79	0.0107	46.2249	93.66	0.0216	–19.8	102.0	82.2	–0.0513	0.2402	–107
–106	1.13	0.82	0.0107	44.3617	93.57	0.0225	–19.5	101.8	82.3	–0.0505	0.2397	–106
–105	1.18	0.86	0.0107	42.5858	93.47	0.0235	–19.2	101.7	82.5	–0.0496	0.2393	–105
–104	1.23	0.89	0.0107	40.8927	93.37	0.0245	–18.9	101.5	82.6	–0.0488	0.2389	–104
–103	1.28	0.93	0.0107	39.2779	93.27	0.0255	–18.6	101.4	82.8	–0.0480	0.2385	–103
–102	1.33	0.97	0.0107	37.7374	93.18	0.0265	–18.3	101.3	82.9	–0.0472	0.2382	–102
–101	1.39	1.02	0.0107	36.2673	93.08	0.0276	–18.0	101.1	83.1	–0.0464	0.2378	–101
–100	1.44	1.06	0.0108	34.8640	92.98	0.0287	–17.7	101.0	83.2	–0.0455	0.2374	–100
–99	1.50	1.11	0.0108	33.5241	92.88	0.0298	–17.4	100.8	83.4	–0.0447	0.2370	–99
–98	1.56	1.15	0.0108	32.2443	92.79	0.0310	–17.2	100.7	83.5	–0.0439	0.2366	–98
–97	1.62	1.20	0.0108	31.0216	92.69	0.0322	–16.9	100.6	83.7	–0.0431	0.2363	–97
–96	1.68	1.25	0.0108	29.8531	92.59	0.0335	–16.6	100.4	83.8	–0.0423	0.2359	–96
–95	1.75	1.30	0.0108	28.7361	92.49	0.0348	–16.3	100.3	84.0	–0.0415	0.2355	–95
–94	1.81	1.36	0.0108	27.6680	92.40	0.0361	–16.0	100.1	84.1	–0.0407	0.2352	–94
–93	1.88	1.41	0.0108	26.6463	92.30	0.0375	–15.7	100.0	84.3	–0.0399	0.2348	–93
–92	1.95	1.47	0.0108	25.6689	92.20	0.0390	–15.4	99.8	84.4	–0.0391	0.2345	–92
–91	2.03	1.53	0.0109	24.7335	92.10	0.0404	–15.1	99.7	84.6	–0.0383	0.2341	–91

Table 1 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
–90	2.10	1.59	0.0109	23.8381	92.00	0.0419	–14.8	99.6	84.7	–0.0375	0.2338	–90
–89	2.18	1.65	0.0109	22.9807	91.91	0.0435	–14.5	99.4	84.9	–0.0367	0.2335	–89
–88	2.26	1.72	0.0109	22.1595	91.81	0.0451	–14.2	99.3	85.0	–0.0360	0.2331	–88
–87	2.35	1.79	0.0109	21.3728	91.71	0.0468	–13.9	99.1	85.2	–0.0352	0.2328	–87
–86	2.43	1.86	0.0109	20.6189	91.61	0.0485	–13.6	99.0	85.4	–0.0344	0.2325	–86
–85	2.52	1.93	0.0109	19.8963	91.51	0.0503	–13.3	98.9	85.5	–0.0336	0.2322	–85
–84	2.61	2.00	0.0109	19.2035	91.42	0.0521	–13.1	98.7	85.7	–0.0328	0.2319	–84
–83	2.71	2.08	0.0110	18.5391	91.32	0.0539	–12.8	98.6	85.8	–0.0320	0.2316	–83
–82	2.80	2.16	0.0110	17.9018	91.22	0.0559	–12.5	98.4	86.0	–0.0313	0.2313	–82
–81	2.90	2.24	0.0110	17.2903	91.12	0.0578	–12.2	98.3	86.1	–0.0305	0.2310	–81
–80	3.00	2.32	0.0110	16.7034	91.02	0.0599	–11.9	98.1	86.3	–0.0297	0.2307	–80
–79	3.11	2.41	0.0110	16.1400	90.92	0.0620	–11.6	98.0	86.4	–0.0289	0.2304	–79
–78	3.22	2.50	0.0110	15.5991	90.83	0.0641	–11.3	97.9	86.6	–0.0282	0.2301	–78
–77	3.33	2.59	0.0110	15.0796	90.73	0.0663	–11.0	97.7	86.7	–0.0274	0.2298	–77
–76	3.44	2.69	0.0110	14.5805	90.63	0.0686	–10.7	97.6	86.9	–0.0266	0.2295	–76
–75	3.56	2.79	0.0110	14.1009	90.53	0.0709	–10.4	97.4	87.0	–0.0259	0.2292	–75
–74	3.68	2.89	0.0111	13.6400	90.43	0.0733	–10.1	97.3	87.2	–0.0251	0.2289	–74
–73	3.80	2.99	0.0111	13.1969	90.33	0.0758	–9.8	97.1	87.3	–0.0243	0.2287	–73
–72	3.93	3.10	0.0111	12.7708	90.23	0.0783	–9.5	97.0	87.5	–0.0236	0.2284	–72
–71	4.06	3.21	0.0111	12.3611	90.13	0.0809	–9.2	96.9	87.6	–0.0228	0.2281	–71
–70	4.20	3.32	0.0111	11.9669	90.03	0.0836	–8.9	96.7	87.8	–0.0221	0.2279	–70
–69	4.34	3.43	0.0111	11.5876	89.93	0.0863	–8.6	96.6	87.9	–0.0213	0.2276	–69
–68	4.48	3.55	0.0111	11.2226	89.84	0.0891	–8.3	96.4	88.1	–0.0205	0.2274	–68
–67	4.62	3.68	0.0111	10.8712	89.74	0.0920	–8.0	96.3	88.2	–0.0198	0.2271	–67
–66	4.77	3.80	0.0112	10.5329	89.64	0.0949	–7.8	96.1	88.4	–0.0190	0.2269	–66
–65	4.92	3.93	0.0112	10.2070	89.54	0.0980	–7.5	96.0	88.5	–0.0183	0.2266	–65
–64	5.08	4.07	0.0112	9.8932	89.44	0.1011	–7.2	95.9	88.7	–0.0175	0.2264	–64
–63	5.24	4.20	0.0112	9.5908	89.34	0.1043	–6.9	95.7	88.9	–0.0168	0.2261	–63
–62	5.41	4.34	0.0112	9.2994	89.24	0.1075	–6.6	95.6	89.0	–0.0161	0.2259	–62
–61	5.58	4.49	0.0112	9.0186	89.14	0.1109	–6.3	95.4	89.2	–0.0153	0.2257	–61
–60	5.75	4.64	0.0112	8.7478	89.04	0.1143	–6.0	95.3	89.3	–0.0146	0.2254	–60
–59	5.93	4.79	0.0112	8.4867	88.94	0.1178	–5.7	95.1	89.5	–0.0138	0.2252	–59
–58	6.11	4.95	0.0113	8.2349	88.84	0.1214	–5.4	95.0	89.6	–0.0131	0.2250	–58
–57	6.30	5.11	0.0113	7.9920	88.74	0.1251	–5.1	94.9	89.8	–0.0123	0.2248	–57
–56	6.49	5.27	0.0113	7.7577	88.64	0.1289	–4.8	94.7	89.9	–0.0116	0.2246	–56
–55	6.69	5.44	0.0113	7.5315	88.53	0.1328	–4.5	94.6	90.1	–0.0109	0.2243	–55
–54	6.89	5.61	0.0113	7.3132	88.43	0.1367	–4.2	94.4	90.2	–0.0101	0.2241	–54
–53	7.10	5.79	0.0113	7.1024	88.33	0.1408	–3.9	94.3	90.4	–0.0094	0.2239	–53
–52	7.31	5.98	0.0113	6.8989	88.23	0.1449	–3.6	94.1	90.5	–0.0087	0.2237	–52
–51	7.52	6.16	0.0113	6.7024	88.13	0.1492	–3.3	94.0	90.7	–0.0079	0.2235	–51
–50	7.74	6.35	0.0114	6.5126	88.03	0.1535	–3.0	93.8	90.8	–0.0072	0.2233	–50
–49	7.97	6.55	0.0114	6.3291	87.93	0.1580	–2.7	93.7	91.0	–0.0065	0.2231	–49
–48	8.20	6.75	0.0114	6.1519	87.83	0.1626	–2.4	93.5	91.1	–0.0058	0.2229	–48
–47	8.44	6.96	0.0114	5.9806	87.73	0.1672	–2.1	93.4	91.3	–0.0050	0.2227	–47
–46	8.68	7.17	0.0114	5.8150	87.62	0.1720	–1.8	93.2	91.4	–0.0043	0.2225	–46
–45	8.93	7.39	0.0114	5.6549	87.52	0.1768	–1.5	93.1	91.6	–0.0036	0.2224	–45
–44	9.18	7.61	0.0114	5.5000	87.42	0.1818	–1.2	93.0	91.8	–0.0029	0.2222	–44
–43	9.44	7.84	0.0115	5.3503	87.32	0.1869	–0.9	92.8	91.9	–0.0022	0.2220	–43
–42	9.71	8.07	0.0115	5.2054	87.22	0.1921	–0.6	92.7	92.1	–0.0014	0.2218	–42
–41	9.98	8.31	0.0115	5.0652	87.11	0.1974	–0.3	92.5	92.2	–0.0007	0.2216	–41
–40	10.25	8.55	0.0115	4.9296	87.01	0.2029	0.0	92.4	92.4	0.0000	0.2215	–40
–39	10.54	8.80	0.0115	4.7983	86.91	0.2084	0.3	92.2	92.5	0.0007	0.2213	–39
–38	10.83	9.06	0.0115	4.6712	86.81	0.2141	0.6	92.1	92.7	0.0014	0.2211	–38
–37	11.12	9.32	0.0115	4.5481	86.70	0.2199	0.9	91.9	92.8	0.0021	0.2209	–37
–36	11.43	9.58	0.0115	4.4289	86.60	0.2258	1.2	91.8	93.0	0.0029	0.2208	–36
–35	11.73	9.86	0.0116	4.3135	86.50	0.2318	1.5	91.6	93.1	0.0036	0.2206	–35
–34	12.05	10.14	0.0116	4.2017	86.39	0.2380	1.8	91.5	93.3	0.0043	0.2205	–34
–33	12.37	10.42	0.0116	4.0933	86.29	0.2443	2.1	91.3	93.4	0.0050	0.2203	–33
–32	12.70	10.72	0.0116	3.9883	86.19	0.2507	2.4	91.2	93.6	0.0057	0.2201	–32
–31	13.04	11.01	0.0116	3.8866	86.08	0.2573	2.7	91.0	93.7	0.0064	0.2200	–31

Table 1 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
–30	13.38	11.32	0.0116	3.7880	85.98	0.2640	3.0	90.9	93.9	0.0071	0.2198	–30
–29	13.73	11.63	0.0116	3.6924	85.87	0.2708	3.3	90.7	94.0	0.0078	0.2197	–29
–28	14.08	11.95	0.0117	3.5996	85.77	0.2778	3.6	90.6	94.2	0.0085	0.2195	–28
–27	14.45	12.28	0.0117	3.5097	85.66	0.2849	3.9	90.4	94.3	0.0092	0.2194	–27
–26	14.82	12.61	0.0117	3.4225	85.56	0.2922	4.2	90.3	94.5	0.0099	0.2192	–26
–25	15.20	12.95	0.0117	3.3379	85.46	0.2996	4.5	90.1	94.6	0.0106	0.2191	–25
–24	15.59	13.30	0.0117	3.2558	85.35	0.3071	4.8	89.9	94.8	0.0113	0.2190	–24
–23	15.98	13.65	0.0117	3.1761	85.25	0.3148	5.1	89.8	94.9	0.0120	0.2188	–23
–22	16.38	14.01	0.0117	3.0988	85.14	0.3227	5.5	89.6	95.1	0.0127	0.2187	–22
–21	16.79	14.38	0.0118	3.0237	85.03	0.3307	5.8	89.5	95.2	0.0134	0.2185	–21
–20	17.21	14.76	0.0118	2.9509	84.93	0.3389	6.1	89.3	95.4	0.0141	0.2184	–20
–19	17.64	15.14	0.0118	2.8801	84.82	0.3472	6.4	89.2	95.5	0.0148	0.2183	–19
–18	18.07	15.54	0.0118	2.8114	84.72	0.3557	6.7	89.0	95.7	0.0155	0.2182	–18
–17	18.52	15.94	0.0118	2.7447	84.61	0.3643	7.0	88.9	95.8	0.0161	0.2180	–17
–16	18.97	16.35	0.0118	2.6798	84.50	0.3732	7.3	88.7	96.0	0.0168	0.2179	–16
–15	19.43	16.76	0.0118	2.6169	84.40	0.3821	7.6	88.5	96.1	0.0175	0.2178	–15
–14	19.90	17.19	0.0119	2.5557	84.29	0.3913	7.9	88.4	96.3	0.0182	0.2177	–14
–13	20.38	17.62	0.0119	2.4962	84.18	0.4006	8.2	88.2	96.4	0.0189	0.2175	–13
–12	20.86	18.07	0.0119	2.4384	84.08	0.4101	8.5	88.1	96.6	0.0196	0.2174	–12
–11	21.36	18.52	0.0119	2.3822	83.97	0.4198	8.8	87.9	96.7	0.0203	0.2173	–11
–10	21.86	18.98	0.0119	2.3275	83.86	0.4296	9.1	87.8	96.9	0.0210	0.2172	–10
–9	22.38	19.45	0.0119	2.2744	83.75	0.4397	9.4	87.6	97.0	0.0216	0.2171	–9
–8	22.90	19.92	0.0120	2.2227	83.65	0.4499	9.7	87.4	97.2	0.0223	0.2170	–8
–7	23.43	20.41	0.0120	2.1725	83.54	0.4603	10.1	87.3	97.3	0.0230	0.2169	–7
–6	23.98	20.91	0.0120	2.1236	83.43	0.4709	10.4	87.1	97.5	0.0237	0.2167	–6
–5	24.53	21.41	0.0120	2.0760	83.32	0.4817	10.7	87.0	97.6	0.0244	0.2166	–5
–4	25.09	21.93	0.0120	2.0298	83.21	0.4927	11.0	86.8	97.8	0.0250	0.2165	–4
–3	25.67	22.45	0.0120	1.9847	83.10	0.5038	11.3	86.6	97.9	0.0257	0.2164	–3
–2	26.25	22.99	0.0120	1.9409	83.00	0.5152	11.6	86.5	98.1	0.0264	0.2163	–2
–1	26.84	23.53	0.0121	1.8982	82.89	0.5268	11.9	86.3	98.2	0.0271	0.2162	–1
0	27.44	24.09	0.0121	1.8567	82.78	0.5386	12.2	86.1	98.4	0.0277	0.2161	0
1	28.06	24.65	0.0121	1.8163	82.67	0.5506	12.5	86.0	98.5	0.0284	0.2160	1
2	28.68	25.23	0.0121	1.7769	82.56	0.5628	12.8	85.8	98.7	0.0291	0.2159	2
3	29.32	25.81	0.0121	1.7385	82.45	0.5752	13.2	85.6	98.8	0.0298	0.2158	3
4	29.96	26.41	0.0121	1.7012	82.34	0.5878	13.5	85.5	99.0	0.0304	0.2157	4
5	30.62	27.02	0.0122	1.6648	82.23	0.6007	13.8	85.3	99.1	0.0311	0.2157	5
6	31.29	27.63	0.0122	1.6294	82.11	0.6137	14.1	85.1	99.2	0.0318	0.2156	6
7	31.97	28.26	0.0122	1.5948	82.00	0.6270	14.4	85.0	99.4	0.0324	0.2155	7
8	32.66	28.90	0.0122	1.5612	81.89	0.6405	14.7	84.8	99.5	0.0331	0.2154	8
9	33.36	29.55	0.0122	1.5284	81.78	0.6543	15.0	84.6	99.7	0.0338	0.2153	9
10	34.08	30.21	0.0122	1.4964	81.67	0.6683	15.4	84.5	99.8	0.0344	0.2152	10
11	34.80	30.89	0.0123	1.4652	81.56	0.6825	15.7	84.3	100.0	0.0351	0.2151	11
12	35.54	31.57	0.0123	1.4348	81.44	0.6969	16.0	84.1	100.1	0.0358	0.2150	12
13	36.29	32.27	0.0123	1.4052	81.33	0.7116	16.3	84.0	100.3	0.0364	0.2150	13
14	37.05	32.98	0.0123	1.3763	81.22	0.7266	16.6	83.8	100.4	0.0371	0.2149	14
15	37.83	33.70	0.0123	1.3481	81.11	0.7418	16.9	83.6	100.6	0.0378	0.2148	15
16	38.61	34.43	0.0123	1.3206	80.99	0.7572	17.2	83.5	100.7	0.0384	0.2147	16
17	39.41	35.17	0.0124	1.2938	80.88	0.7729	17.6	83.3	100.8	0.0391	0.2146	17
18	40.22	35.93	0.0124	1.2677	80.76	0.7889	17.9	83.1	101.0	0.0397	0.2146	18
19	41.05	36.70	0.0124	1.2421	80.65	0.8051	18.2	82.9	101.1	0.0404	0.2145	19
20	41.88	37.48	0.0124	1.2172	80.54	0.8215	18.5	82.8	101.3	0.0411	0.2144	20
21	42.74	38.28	0.0124	1.1929	80.42	0.8383	18.8	82.6	101.4	0.0417	0.2143	21
22	43.60	39.09	0.0125	1.1692	80.31	0.8553	19.1	82.4	101.6	0.0424	0.2143	22
23	44.48	39.91	0.0125	1.1460	80.19	0.8726	19.5	82.2	101.7	0.0430	0.2142	23
24	45.37	40.74	0.0125	1.1234	80.07	0.8901	19.8	82.0	101.8	0.0437	0.2141	24
25	46.27	41.59	0.0125	1.1014	79.96	0.9080	20.1	81.9	102.0	0.0443	0.2141	25
26	47.19	42.45	0.0125	1.0798	79.84	0.9261	20.4	81.7	102.1	0.0450	0.2140	26
27	48.12	43.33	0.0125	1.0587	79.73	0.9445	20.7	81.5	102.3	0.0456	0.2139	27
28	49.07	44.22	0.0126	1.0382	79.61	0.9632	21.1	81.3	102.4	0.0463	0.2139	28
29	50.03	45.12	0.0126	1.0181	79.49	0.9822	21.4	81.2	102.5	0.0469	0.2138	29

Table 1 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
30	51.00	46.04	0.0126	0.9985	79.37	1.0015	21.7	81.0	102.7	0.0476	0.2137	30
31	51.99	46.97	0.0126	0.9793	79.26	1.0211	22.0	80.8	102.8	0.0482	0.2137	31
32	52.99	47.91	0.0126	0.9606	79.14	1.0410	22.4	80.6	103.0	0.0489	0.2136	32
33	54.01	48.87	0.0127	0.9423	79.02	1.0612	22.7	80.4	103.1	0.0495	0.2136	33
34	55.04	49.85	0.0127	0.9244	78.90	1.0817	23.0	80.2	103.2	0.0502	0.2135	34
35	56.09	50.84	0.0127	0.9070	78.78	1.1026	23.3	80.1	103.4	0.0508	0.2134	35
36	57.15	51.84	0.0127	0.8899	78.66	1.1238	23.6	79.9	103.5	0.0515	0.2134	36
37	58.23	52.86	0.0127	0.8732	78.54	1.1452	24.0	79.7	103.6	0.0521	0.2133	37
38	59.33	53.89	0.0128	0.8569	78.42	1.1671	24.3	79.5	103.8	0.0528	0.2133	38
39	60.44	54.94	0.0128	0.8409	78.30	1.1892	24.6	79.3	103.9	0.0534	0.2132	39
40	61.56	56.01	0.0128	0.8253	78.18	1.2117	24.9	79.1	104.1	0.0541	0.2131	40
41	62.70	57.09	0.0128	0.8100	78.06	1.2345	25.3	78.9	104.2	0.0547	0.2131	41
42	63.86	58.19	0.0128	0.7951	77.94	1.2577	25.6	78.7	104.3	0.0554	0.2130	42
43	65.03	59.30	0.0129	0.7805	77.82	1.2812	25.9	78.6	104.5	0.0560	0.2130	43
44	66.22	60.43	0.0129	0.7662	77.70	1.3051	26.2	78.4	104.6	0.0567	0.2129	44
45	67.43	61.58	0.0129	0.7522	77.57	1.3294	26.6	78.2	104.7	0.0573	0.2129	45
46	68.65	62.74	0.0129	0.7386	77.45	1.3540	26.9	78.0	104.9	0.0579	0.2128	46
47	69.89	63.92	0.0129	0.7252	77.33	1.3790	27.2	77.8	105.0	0.0586	0.2128	47
48	71.15	65.11	0.0130	0.7121	77.20	1.4043	27.6	77.6	105.1	0.0592	0.2127	48
49	72.42	66.33	0.0130	0.6993	77.08	1.4300	27.9	77.4	105.3	0.0599	0.2127	49
50	73.71	67.55	0.0130	0.6868	76.95	1.4561	28.2	77.2	105.4	0.0605	0.2126	50
51	75.02	68.80	0.0130	0.6745	76.83	1.4826	28.5	77.0	105.5	0.0612	0.2126	51
52	76.34	70.07	0.0130	0.6625	76.70	1.5095	28.9	76.8	105.7	0.0618	0.2125	52
53	77.69	71.35	0.0131	0.6507	76.58	1.5368	29.2	76.6	105.8	0.0624	0.2125	53
54	79.05	72.65	0.0131	0.6392	76.45	1.5645	29.5	76.4	105.9	0.0631	0.2124	54
55	80.43	73.96	0.0131	0.6279	76.33	1.5926	29.9	76.2	106.1	0.0637	0.2124	55
56	81.82	75.30	0.0131	0.6169	76.20	1.6211	30.2	76.0	106.2	0.0643	0.2123	56
57	83.24	76.65	0.0131	0.6061	76.07	1.6500	30.5	75.8	106.3	0.0650	0.2123	57
58	84.67	78.03	0.0132	0.5955	75.94	1.6794	30.9	75.6	106.5	0.0656	0.2123	58
59	86.12	79.42	0.0132	0.5851	75.82	1.7091	31.2	75.4	106.6	0.0663	0.2122	59
60	87.60	80.82	0.0132	0.5749	75.69	1.7394	31.5	75.2	106.7	0.0669	0.2122	60
61	89.09	82.25	0.0132	0.5650	75.56	1.7700	31.9	75.0	106.8	0.0675	0.2121	61
62	90.59	83.70	0.0133	0.5552	75.43	1.8011	32.2	74.8	107.0	0.0682	0.2121	62
63	92.12	85.17	0.0133	0.5457	75.30	1.8327	32.5	74.6	107.1	0.0688	0.2120	63
64	93.67	86.65	0.0133	0.5363	75.17	1.8647	32.9	74.3	107.2	0.0694	0.2120	64
65	95.24	88.16	0.0133	0.5271	75.04	1.8971	33.2	74.1	107.3	0.0701	0.2119	65
66	96.82	89.68	0.0134	0.5181	74.91	1.9301	33.5	73.9	107.5	0.0707	0.2119	66
67	98.43	91.23	0.0134	0.5093	74.77	1.9635	33.9	73.7	107.6	0.0713	0.2119	67
68	100.06	92.79	0.0134	0.5006	74.64	1.9974	34.2	73.5	107.7	0.0720	0.2118	68
69	101.70	94.38	0.0134	0.4922	74.51	2.0318	34.6	73.3	107.8	0.0726	0.2118	69
70	103.37	95.98	0.0134	0.4839	74.37	2.0667	34.9	73.1	108.0	0.0732	0.2117	70
71	105.06	97.61	0.0135	0.4757	74.24	2.1021	35.2	72.9	108.1	0.0739	0.2117	71
72	106.77	99.25	0.0135	0.4677	74.11	2.1380	35.6	72.6	108.2	0.0745	0.2117	72
73	108.50	100.92	0.0135	0.4599	73.97	2.1744	35.9	72.4	108.3	0.0751	0.2116	73
74	110.25	102.61	0.0135	0.4522	73.84	2.2114	36.3	72.2	108.5	0.0758	0.2116	74
75	112.02	104.32	0.0136	0.4447	73.70	2.2488	36.6	72.0	108.6	0.0764	0.2115	75
76	113.81	106.05	0.0136	0.4373	73.56	2.2868	36.9	71.7	108.7	0.0770	0.2115	76
77	115.62	107.80	0.0136	0.4300	73.43	2.3254	37.3	71.5	108.8	0.0777	0.2115	77
78	117.46	109.57	0.0136	0.4229	73.29	2.3645	37.6	71.3	108.9	0.0783	0.2114	78
79	119.31	111.37	0.0137	0.4159	73.15	2.4042	38.0	71.1	109.0	0.0789	0.2114	79
80	121.19	113.19	0.0137	0.4091	73.01	2.4444	38.3	70.8	109.2	0.0796	0.2113	80
81	123.10	115.03	0.0137	0.4024	72.87	2.4853	38.7	70.6	109.3	0.0802	0.2113	81
82	125.02	116.89	0.0137	0.3958	72.73	2.5267	39.0	70.4	109.4	0.0808	0.2113	82
83	126.97	118.78	0.0138	0.3893	72.59	2.5687	39.4	70.2	109.5	0.0814	0.2112	83
84	128.93	120.68	0.0138	0.3830	72.45	2.6113	39.7	69.9	109.6	0.0821	0.2112	84
85	130.93	122.62	0.0138	0.3767	72.31	2.6545	40.1	69.7	109.7	0.0827	0.2111	85
86	132.94	124.57	0.0139	0.3706	72.16	2.6983	40.4	69.5	109.9	0.0833	0.2111	86
87	134.98	126.55	0.0139	0.3646	72.02	2.7428	40.7	69.2	110.0	0.0840	0.2111	87
88	137.04	128.55	0.0139	0.3587	71.88	2.7879	41.1	69.0	110.1	0.0846	0.2110	88
89	139.12	130.57	0.0139	0.3529	71.73	2.8337	41.4	68.7	110.2	0.0852	0.2110	89

Table 1 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
90	141.23	132.62	0.0140	0.3472	71.59	2.8801	41.8	68.5	110.3	0.0858	0.2109	90
91	143.36	134.70	0.0140	0.3416	71.44	2.9272	42.2	68.3	110.4	0.0865	0.2109	91
92	145.52	136.79	0.0140	0.3361	71.29	2.9749	42.5	68.0	110.5	0.0871	0.2109	92
93	147.70	138.91	0.0141	0.3308	71.15	3.0234	42.9	67.8	110.6	0.0877	0.2108	93
94	149.90	141.06	0.0141	0.3255	71.00	3.0725	43.2	67.5	110.7	0.0884	0.2108	94
95	152.13	143.23	0.0141	0.3203	70.85	3.1224	43.6	67.3	110.8	0.0890	0.2107	95
96	154.39	145.43	0.0141	0.3152	70.70	3.1730	43.9	67.0	111.0	0.0896	0.2107	96
97	156.67	147.65	0.0142	0.3101	70.55	3.2243	44.3	66.8	111.1	0.0903	0.2107	97
98	158.97	149.89	0.0142	0.3052	70.40	3.2764	44.6	66.5	111.2	0.0909	0.2106	98
99	161.30	152.17	0.0142	0.3004	70.25	3.3292	45.0	66.3	111.3	0.0915	0.2106	99
100	163.65	154.47	0.0143	0.2956	70.09	3.3828	45.3	66.0	111.4	0.0921	0.2105	100
101	166.03	156.79	0.0143	0.2909	69.94	3.4372	45.7	65.8	111.5	0.0928	0.2105	101
102	168.44	159.14	0.0143	0.2863	69.79	3.4924	46.1	65.5	111.6	0.0934	0.2104	102
103	170.87	161.52	0.0144	0.2818	69.63	3.5484	46.4	65.2	111.7	0.0940	0.2104	103
104	173.33	163.92	0.0144	0.2774	69.47	3.6052	46.8	65.0	111.8	0.0947	0.2104	104
105	175.82	166.35	0.0144	0.2730	69.32	3.6628	47.2	64.7	111.9	0.0953	0.2103	105
106	178.33	168.81	0.0145	0.2687	69.16	3.7213	47.5	64.5	112.0	0.0959	0.2103	106
107	180.87	171.29	0.0145	0.2645	69.00	3.7807	47.9	64.2	112.1	0.0965	0.2102	107
108	183.43	173.80	0.0145	0.2604	68.84	3.8409	48.2	63.9	112.2	0.0972	0.2102	108
109	186.02	176.34	0.0146	0.2563	68.68	3.9021	48.6	63.6	112.3	0.0978	0.2101	109
110	188.64	178.91	0.0146	0.2523	68.52	3.9641	49.0	63.4	112.3	0.0984	0.2101	110
111	191.29	181.50	0.0146	0.2483	68.36	4.0271	49.3	63.1	112.4	0.0991	0.2100	111
112	193.96	184.13	0.0147	0.2444	68.19	4.0910	49.7	62.8	112.5	0.0997	0.2100	112
113	196.67	186.78	0.0147	0.2406	68.03	4.1559	50.1	62.5	112.6	0.1003	0.2099	113
114	199.40	189.46	0.0147	0.2369	67.86	4.2218	50.4	62.3	112.7	0.1010	0.2099	114
115	202.15	192.17	0.0148	0.2332	67.70	4.2887	50.8	62.0	112.8	0.1016	0.2098	115
116	204.94	194.91	0.0148	0.2295	67.53	4.3566	51.2	61.7	112.9	0.1022	0.2098	116
117	207.76	197.67	0.0148	0.2260	67.36	4.4255	51.6	61.4	113.0	0.1029	0.2097	117
118	210.60	200.47	0.0149	0.2224	67.19	4.4955	51.9	61.1	113.1	0.1035	0.2097	118
119	213.48	203.30	0.0149	0.2190	67.02	4.5666	52.3	60.8	113.1	0.1041	0.2096	119
120	216.38	206.15	0.0150	0.2156	66.85	4.6387	52.7	60.5	113.2	0.1048	0.2095	120
121	219.31	209.04	0.0150	0.2122	66.68	4.7120	53.1	60.2	113.3	0.1054	0.2095	121
122	222.28	211.96	0.0150	0.2089	66.50	4.7864	53.4	59.9	113.4	0.1060	0.2094	122
123	225.27	214.91	0.0151	0.2057	66.33	4.8620	53.8	59.6	113.5	0.1067	0.2094	123
124	228.29	217.89	0.0151	0.2025	66.15	4.9388	54.2	59.3	113.5	0.1073	0.2093	124
125	231.34	220.90	0.0152	0.1993	65.97	5.0168	54.6	59.0	113.6	0.1079	0.2092	125
126	234.43	223.94	0.0152	0.1962	65.79	5.0960	55.0	58.7	113.7	0.1086	0.2092	126
127	237.54	227.01	0.0152	0.1932	65.61	5.1766	55.3	58.4	113.8	0.1092	0.2091	127
128	240.69	230.11	0.0153	0.1902	65.43	5.2584	55.7	58.1	113.8	0.1099	0.2091	128
129	243.86	233.25	0.0153	0.1872	65.25	5.3415	56.1	57.8	113.9	0.1105	0.2090	129
130	247.07	236.42	0.0154	0.1843	65.06	5.4260	56.5	57.5	114.0	0.1111	0.2089	130
131	250.31	239.62	0.0154	0.1814	64.88	5.5118	56.9	57.2	114.0	0.1118	0.2088	131
132	253.58	242.86	0.0155	0.1786	64.69	5.5991	57.3	56.8	114.1	0.1124	0.2088	132
133	256.88	246.12	0.0155	0.1758	64.50	5.6879	57.7	56.5	114.2	0.1131	0.2087	133
134	260.22	249.43	0.0155	0.1731	64.31	5.7781	58.1	56.2	114.2	0.1137	0.2086	134
135	263.59	252.76	0.0156	0.1704	64.12	5.8698	58.4	55.9	114.3	0.1143	0.2086	135
136	266.99	256.13	0.0156	0.1677	63.93	5.9631	58.8	55.5	114.4	0.1150	0.2085	136
137	270.42	259.53	0.0157	0.1651	63.73	6.0580	59.2	55.2	114.4	0.1156	0.2084	137
138	273.89	262.97	0.0157	0.1625	63.53	6.1545	59.6	54.8	114.5	0.1163	0.2083	138
139	277.39	266.44	0.0158	0.1599	63.33	6.2526	60.0	54.5	114.5	0.1169	0.2082	139
140	280.92	269.94	0.0158	0.1574	63.13	6.3525	60.4	54.1	114.6	0.1176	0.2081	140
141	284.49	273.49	0.0159	0.1549	62.93	6.4542	60.8	53.8	114.6	0.1182	0.2081	141
142	288.09	277.06	0.0159	0.1525	62.73	6.5576	61.2	53.4	114.7	0.1189	0.2080	142
143	291.73	280.68	0.0160	0.1501	62.52	6.6630	61.6	53.1	114.7	0.1195	0.2079	143
144	295.40	284.32	0.0160	0.1477	62.31	6.7702	62.0	52.7	114.8	0.1202	0.2078	144
145	299.11	288.01	0.0161	0.1454	62.10	6.8794	62.4	52.4	114.8	0.1208	0.2077	145
146	302.85	291.73	0.0162	0.1431	61.89	6.9905	62.9	52.0	114.8	0.1215	0.2076	146
147	306.62	295.49	0.0162	0.1408	61.68	7.1038	63.3	51.6	114.9	0.1222	0.2075	147
148	310.43	299.28	0.0163	0.1385	61.46	7.2192	63.7	51.2	114.9	0.1228	0.2074	148
149	314.28	303.12	0.0163	0.1363	61.24	7.3368	64.1	50.9	114.9	0.1235	0.2073	149

Table 1 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ 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	VAPOR	LIQUID v_f	VAPOR v_g	LIQUID d_f	VAPOR d_g	LIQUID h_f	LATENT h_{fg}	VAPOR h_g	LIQUID s_f	VAPOR s_g	
150	318.17	306.99	0.0164	0.1341	61.02	7.4566	64.5	50.5	115.0	0.1241	0.2072	150
151	322.09	310.90	0.0164	0.1319	60.80	7.5788	64.9	50.1	115.0	0.1248	0.2070	151
152	326.04	314.85	0.0165	0.1298	60.57	7.7034	65.3	49.7	115.0	0.1255	0.2069	152
153	330.04	318.83	0.0166	0.1277	60.34	7.8304	65.8	49.3	115.0	0.1261	0.2068	153
154	334.07	322.86	0.0166	0.1256	60.11	7.9601	66.2	48.9	115.1	0.1268	0.2067	154
155	338.14	326.92	0.0167	0.1236	59.88	8.0923	66.6	48.5	115.1	0.1275	0.2066	155
156	342.25	331.03	0.0168	0.1215	59.64	8.2273	67.0	48.1	115.1	0.1282	0.2064	156
157	346.39	335.17	0.0168	0.1195	59.40	8.3652	67.5	47.6	115.1	0.1288	0.2063	157
158	350.57	339.36	0.0169	0.1176	59.16	8.5059	67.9	47.2	115.1	0.1295	0.2062	158
159	354.80	343.59	0.0170	0.1156	58.91	8.6498	68.3	46.8	115.1	0.1302	0.2060	159
160	359.06	347.86	0.0170	0.1137	58.66	8.7967	68.8	46.3	115.1	0.1309	0.2059	160
161	363.36	352.17	0.0171	0.1118	58.41	8.9470	69.2	45.9	115.1	0.1316	0.2057	161
162	367.70	356.52	0.0172	0.1099	58.16	9.1006	69.7	45.5	115.1	0.1323	0.2056	162
163	372.08	360.91	0.0173	0.1080	57.90	9.2578	70.1	45.0	115.1	0.1329	0.2054	163
164	376.50	365.35	0.0174	0.1062	57.63	9.4186	70.5	44.5	115.1	0.1336	0.2052	164
165	380.96	369.83	0.0174	0.1043	57.37	9.5833	71.0	44.1	115.1	0.1343	0.2051	165
166	385.46	374.36	0.0175	0.1025	57.09	9.7520	71.4	43.6	115.0	0.1350	0.2049	166
167	390.00	378.93	0.0176	0.1008	56.82	9.9248	71.9	43.1	115.0	0.1357	0.2047	167
168	394.58	383.54	0.0177	0.0990	56.54	10.1020	72.4	42.6	115.0	0.1365	0.2045	168
169	399.21	388.20	0.0178	0.0972	56.25	10.2838	72.8	42.1	114.9	0.1372	0.2043	169
170	403.88	392.91	0.0179	0.0955	55.96	10.4704	73.3	41.6	114.9	0.1379	0.2041	170

Table 2
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	1.2			2			3			4			TEMP. °F
	–97.02			–84.04			–72.90			–64.49			
	V	H	S	V	H	S	V	H	S	V	H	S	
	31.0417	83.7	0.2363	19.2294	85.6	0.2319	13.1531	87.3	0.2286	10.0469	88.6	0.2265	
–90	31.6618	84.8	0.2393	–	–	–	–	–	–	–	–	–	–90
–80	32.5427	86.4	0.2437	19.4456	86.3	0.2336	–	–	–	–	–	–	–80
–70	33.4210	88.1	0.2480	19.9793	88.0	0.2380	13.2577	87.8	0.2299	–	–	–	–70
–60	34.2972	89.8	0.2522	20.5108	89.7	0.2422	13.6170	89.5	0.2342	10.1696	89.4	0.2284	–60
–50	35.1717	91.5	0.2564	21.0405	91.4	0.2464	13.9745	91.2	0.2385	10.4411	91.1	0.2327	–50
–40	36.0448	93.2	0.2605	21.5688	93.1	0.2506	14.3305	93.0	0.2426	10.7110	92.9	0.2369	–40
–30	36.9168	94.9	0.2646	22.0959	94.8	0.2547	14.6852	94.7	0.2468	10.9797	94.6	0.2411	–30
–20	37.7877	96.7	0.2687	22.6220	96.6	0.2588	15.0389	96.5	0.2509	11.2472	96.4	0.2452	–20
–10	38.6579	98.5	0.2727	23.1473	98.4	0.2628	15.3918	98.3	0.2549	11.5139	98.2	0.2493	–10
0	39.5273	100.3	0.2767	23.6718	100.2	0.2669	15.7439	100.2	0.2590	11.7798	100.1	0.2533	0
10	40.3960	102.1	0.2807	24.1956	102.1	0.2708	16.0953	102.0	0.2629	12.0450	101.9	0.2573	10
20	41.2642	104.0	0.2846	24.7189	103.9	0.2748	16.4462	103.9	0.2669	12.3097	103.8	0.2613	20
30	42.1320	105.9	0.2885	25.2418	105.8	0.2787	16.7966	105.8	0.2708	12.5739	105.7	0.2652	30
40	42.9992	107.8	0.2924	25.7641	107.8	0.2825	17.1465	107.7	0.2747	12.8376	107.6	0.2691	40
50	43.8662	109.7	0.2962	26.2861	109.7	0.2864	17.4960	109.6	0.2785	13.1009	109.6	0.2729	50
60	44.7327	111.7	0.3001	26.8078	111.7	0.2902	17.8452	111.6	0.2824	13.3639	111.6	0.2768	60
70	45.5990	113.7	0.3038	27.3291	113.6	0.2940	18.1941	113.6	0.2862	13.6266	113.5	0.2806	70
80	46.4649	115.7	0.3076	27.8502	115.7	0.2978	18.5427	115.6	0.2899	13.8890	115.6	0.2843	80
90	47.3307	117.7	0.3113	28.3710	117.7	0.3015	18.8911	117.6	0.2937	14.1511	117.6	0.2881	90
100	48.1961	119.8	0.3150	28.8915	119.8	0.3052	19.2392	119.7	0.2974	14.4130	119.7	0.2918	100
110	49.0614	121.9	0.3187	29.4119	121.8	0.3089	19.5871	121.8	0.3011	14.6746	121.8	0.2955	110
120	49.9265	124.0	0.3224	29.9320	123.9	0.3125	19.9348	123.9	0.3047	14.9361	123.9	0.2992	120
130	50.7914	126.1	0.3260	30.4520	126.1	0.3162	20.2823	126.0	0.3084	15.1974	126.0	0.3028	130
140	51.6562	128.2	0.3296	30.9719	128.2	0.3198	20.6297	128.2	0.3120	15.4586	128.1	0.3064	140
150	52.5208	130.4	0.3332	31.4916	130.4	0.3234	20.9769	130.4	0.3156	15.7196	130.3	0.3100	150
160	53.3853	132.6	0.3368	32.0111	132.6	0.3270	21.3240	132.5	0.3192	15.9805	132.5	0.3136	160
170	54.2497	134.8	0.3403	32.5306	134.8	0.3305	21.6710	134.8	0.3227	16.2412	134.7	0.3172	170
180	55.1139	137.1	0.3439	33.0499	137.0	0.3340	22.0179	137.0	0.3262	16.5019	137.0	0.3207	180
190	55.9781	139.3	0.3474	33.5691	139.3	0.3376	22.3646	139.3	0.3297	16.7624	139.2	0.3242	190
200	56.8421	141.6	0.3509	34.0882	141.6	0.3410	22.7113	141.6	0.3332	17.0228	141.5	0.3277	200

ABSOLUTE PRESSURE, psia

TEMP. °F	5			6			7			8			TEMP. °F
	–57.66			–51.87			–46.80			–42.30			
	V	H	S	V	H	S	V	H	S	V	H	S	
	8.1522	89.7	0.2249	6.8722	90.6	0.2237	5.9478	91.3	0.2227	5.2477	92.0	0.2219	
–50	8.3207	91.0	0.2282	6.9068	90.9	0.2245	–	–	–	–	–	–	–50
–40	8.5391	92.8	0.2325	7.0909	92.7	0.2288	6.0562	92.5	0.2256	5.2800	92.4	0.2228	–40
–30	8.7561	94.5	0.2366	7.2736	94.4	0.2330	6.2144	94.3	0.2298	5.4200	94.2	0.2271	–30
–20	8.9720	96.3	0.2408	7.4551	96.2	0.2371	6.3714	96.2	0.2340	5.5586	96.1	0.2313	–20
–10	9.1870	98.2	0.2449	7.6357	98.1	0.2412	6.5275	98.0	0.2381	5.6962	97.9	0.2354	–10
0	9.4012	100.0	0.2489	7.8155	99.9	0.2453	6.6827	99.8	0.2422	5.8330	99.8	0.2395	0
10	9.6148	101.9	0.2529	7.9946	101.8	0.2493	6.8372	101.7	0.2462	5.9691	101.6	0.2436	10
20	9.8278	103.7	0.2569	8.1731	103.7	0.2533	6.9911	103.6	0.2502	6.1045	103.5	0.2476	20
30	10.0402	105.6	0.2608	8.3511	105.6	0.2572	7.1445	105.5	0.2542	6.2395	105.4	0.2515	30
40	10.2522	107.6	0.2647	8.5286	107.5	0.2611	7.2974	107.5	0.2581	6.3739	107.4	0.2554	40
50	10.4638	109.5	0.2686	8.7057	109.5	0.2650	7.4499	109.4	0.2620	6.5080	109.4	0.2593	50
60	10.6751	111.5	0.2724	8.8825	111.4	0.2688	7.6021	111.4	0.2658	6.6417	111.3	0.2632	60
70	10.8860	113.5	0.2762	9.0590	113.4	0.2727	7.7539	113.4	0.2696	6.7751	113.3	0.2670	70
80	11.0967	115.5	0.2800	9.2351	115.5	0.2764	7.9054	115.4	0.2734	6.9081	115.4	0.2708	80
90	11.3071	117.6	0.2837	9.4110	117.5	0.2802	8.0567	117.5	0.2772	7.0409	117.4	0.2746	90
100	11.5172	119.6	0.2875	9.5867	119.6	0.2839	8.2077	119.5	0.2809	7.1735	119.5	0.2783	100
110	11.7272	121.7	0.2912	9.7622	121.7	0.2876	8.3586	121.6	0.2846	7.3059	121.6	0.2820	110
120	11.9369	123.8	0.2948	9.9374	123.8	0.2913	8.5092	123.7	0.2883	7.4380	123.7	0.2857	120
130	12.1465	126.0	0.2985	10.1125	125.9	0.2949	8.6597	125.9	0.2919	7.5700	125.8	0.2893	130
140	12.3559	128.1	0.3021	10.2875	128.1	0.2986	8.8100	128.0	0.2956	7.7018	128.0	0.2930	140
150	12.5652	130.3	0.3057	10.4622	130.2	0.3022	8.9601	130.2	0.2992	7.8335	130.2	0.2966	150
160	12.7743	132.5	0.3093	10.6369	132.4	0.3058	9.1101	132.4	0.3028	7.9651	132.4	0.3002	160
170	12.9833	134.7	0.3128	10.8114	134.7	0.3093	9.2600	134.6	0.3063	8.0965	134.6	0.3037	170
180	13.1922	136.9	0.3164	10.9858	136.9	0.3129	9.4098	136.9	0.3099	8.2278	136.9	0.3073	180
190	13.4010	139.2	0.3199	11.1601	139.2	0.3164	9.5595	139.2	0.3134	8.3590	139.1	0.3108	190
200	13.6097	141.5	0.3234	11.3343	141.5	0.3199	9.7090	141.4	0.3169	8.4900	141.4	0.3143	200
210	13.8183	143.8	0.3269	11.5084	143.8	0.3233	9.8585	143.8	0.3204	8.6210	143.7	0.3178	210
220	14.0268	146.1	0.3303	11.6825	146.1	0.3268	10.0079	146.1	0.3238	8.7520	146.1	0.3212	220
230	14.2353	148.5	0.3338	11.8564	148.5	0.3302	10.1572	148.4	0.3273	8.8828	148.4	0.3247	230
240	14.4437	150.9	0.3372	12.0303	150.8	0.3336	10.3065	150.8	0.3307	9.0136	150.8	0.3281	240

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	9			10			11			12			TEMP. °F
	–38.22			–34.49			–31.05			–27.85			
	V	H	S	V	H	S	V	H	S	V	H	S	
	4.6986	92.6	0.2211	4.2561	93.2	0.2205	3.8915	93.7	0.2200	3.5858	94.2	0.2195	
–30	4.8019	94.1	0.2247	4.3073	94.0	0.2225	3.9025	93.9	0.2204	–	–	–	–30
–20	4.9263	96.0	0.2289	4.4203	95.9	0.2267	4.0062	95.8	0.2247	3.6611	95.7	0.2229	–20
–10	5.0496	97.8	0.2330	4.5323	97.7	0.2309	4.1089	97.6	0.2289	3.7560	97.5	0.2271	–10
0	5.1721	99.7	0.2371	4.6433	99.6	0.2350	4.2106	99.5	0.2330	3.8499	99.4	0.2312	0
10	5.2938	101.6	0.2412	4.7536	101.5	0.2390	4.3115	101.4	0.2371	3.9431	101.3	0.2353	10
20	5.4150	103.5	0.2452	4.8633	103.4	0.2431	4.4118	103.3	0.2411	4.0356	103.2	0.2394	20
30	5.5356	105.4	0.2492	4.9724	105.3	0.2470	4.5116	105.2	0.2451	4.1275	105.2	0.2433	30
40	5.6557	107.3	0.2531	5.0810	107.3	0.2510	4.6108	107.2	0.2491	4.2190	107.1	0.2473	40
50	5.7754	109.3	0.2570	5.1893	109.2	0.2549	4.7097	109.2	0.2530	4.3100	109.1	0.2512	50
60	5.8947	111.3	0.2608	5.2971	111.2	0.2588	4.8081	111.2	0.2568	4.4007	111.1	0.2551	60
70	6.0137	113.3	0.2647	5.4046	113.2	0.2626	4.9063	113.2	0.2607	4.4910	113.1	0.2589	70
80	6.1324	115.3	0.2685	5.5119	115.3	0.2664	5.0041	115.2	0.2645	4.5810	115.2	0.2628	80
90	6.2509	117.4	0.2722	5.6188	117.3	0.2702	5.1017	117.3	0.2683	4.6707	117.2	0.2665	90
100	6.3691	119.4	0.2760	5.7255	119.4	0.2739	5.1990	119.4	0.2720	4.7602	119.3	0.2703	100
110	6.4871	121.5	0.2797	5.8321	121.5	0.2776	5.2961	121.5	0.2757	4.8495	121.4	0.2740	110
120	6.6049	123.7	0.2834	5.9384	123.6	0.2813	5.3930	123.6	0.2794	4.9385	123.5	0.2777	120
130	6.7225	125.8	0.2870	6.0445	125.8	0.2850	5.4897	125.7	0.2831	5.0274	125.7	0.2814	130
140	6.8400	128.0	0.2907	6.1504	127.9	0.2886	5.5863	127.9	0.2867	5.1162	127.8	0.2850	140
150	6.9573	130.1	0.2943	6.2563	130.1	0.2922	5.6827	130.1	0.2904	5.2047	130.0	0.2886	150
160	7.0744	132.3	0.2979	6.3619	132.3	0.2958	5.7790	132.3	0.2939	5.2932	132.2	0.2922	160
170	7.1915	134.6	0.3014	6.4675	134.5	0.2994	5.8751	134.5	0.2975	5.3815	134.5	0.2958	170
180	7.3084	136.8	0.3050	6.5729	136.8	0.3029	5.9712	136.8	0.3011	5.4697	136.7	0.2994	180
190	7.4252	139.1	0.3085	6.6782	139.1	0.3064	6.0671	139.0	0.3046	5.5578	139.0	0.3029	190
200	7.5420	141.4	0.3120	6.7835	141.4	0.3100	6.1629	141.3	0.3081	5.6457	141.3	0.3064	200
210	7.6586	143.7	0.3155	6.8886	143.7	0.3134	6.2586	143.6	0.3116	5.7336	143.6	0.3099	210
220	7.7751	146.0	0.3189	6.9937	146.0	0.3169	6.3543	146.0	0.3150	5.8214	146.0	0.3133	220
230	7.8916	148.4	0.3224	7.0986	148.4	0.3203	6.4498	148.3	0.3185	5.9092	148.3	0.3168	230
240	8.0080	150.8	0.3258	7.2035	150.7	0.3238	6.5453	150.7	0.3219	5.9968	150.7	0.3202	240
250	8.1243	153.2	0.3292	7.3084	153.1	0.3272	6.6408	153.1	0.3253	6.0844	153.1	0.3236	250
260	8.2406	155.6	0.3326	7.4131	155.6	0.3305	6.7361	155.5	0.3287	6.1719	155.5	0.3270	260

ABSOLUTE PRESSURE, psia

TEMP. °F	13			14			14.697			15			TEMP. °F
	–24.85			–22.03			–20.16			–19.37			
	V	H	S	V	H	S	V	H	S	V	H	S	
	3.3256	94.7	0.2191	3.1015	95.1	0.2187	2.9627	95.4	0.2184	2.9062	95.5	0.2183	
–20	3.3690	95.6	0.2212	3.1185	95.5	0.2196	2.9640	95.4	0.2185	–	–	–	–20
–10	3.4573	97.5	0.2254	3.2013	97.4	0.2238	3.0434	97.3	0.2228	2.9793	97.3	0.2223	–10
0	3.5447	99.3	0.2296	3.2831	99.3	0.2280	3.1217	99.2	0.2270	3.0563	99.2	0.2265	0
10	3.6313	101.3	0.2337	3.3640	101.2	0.2321	3.1992	101.1	0.2311	3.1323	101.1	0.2307	10
20	3.7172	103.2	0.2377	3.4443	103.1	0.2362	3.2760	103.1	0.2352	3.2077	103.0	0.2347	20
30	3.8026	105.1	0.2417	3.5240	105.0	0.2402	3.3522	105.0	0.2392	3.2825	105.0	0.2388	30
40	3.8874	107.1	0.2457	3.6032	107.0	0.2442	3.4279	107.0	0.2432	3.3568	106.9	0.2427	40
50	3.9718	109.1	0.2496	3.6819	109.0	0.2481	3.5032	109.0	0.2471	3.4306	108.9	0.2467	50
60	4.0558	111.1	0.2535	3.7603	111.0	0.2520	3.5780	111.0	0.2510	3.5041	110.9	0.2506	60
70	4.1395	113.1	0.2573	3.8383	113.0	0.2558	3.6526	113.0	0.2549	3.5772	113.0	0.2545	70
80	4.2229	115.1	0.2612	3.9160	115.1	0.2597	3.7268	115.0	0.2587	3.6500	115.0	0.2583	80
90	4.3060	117.2	0.2649	3.9934	117.1	0.2635	3.8007	117.1	0.2625	3.7225	117.1	0.2621	90
100	4.3889	119.3	0.2687	4.0706	119.2	0.2672	3.8744	119.2	0.2663	3.7948	119.2	0.2658	100
110	4.4715	121.4	0.2724	4.1476	121.3	0.2710	3.9479	121.3	0.2700	3.8668	121.3	0.2696	110
120	4.5540	123.5	0.2761	4.2244	123.5	0.2747	4.0211	123.4	0.2737	3.9387	123.4	0.2733	120
130	4.6363	125.6	0.2798	4.3009	125.6	0.2783	4.0942	125.6	0.2774	4.0103	125.6	0.2770	130
140	4.7183	127.8	0.2834	4.3774	127.8	0.2820	4.1671	127.7	0.2810	4.0818	127.7	0.2806	140
150	4.8003	130.0	0.2871	4.4536	130.0	0.2856	4.2399	129.9	0.2846	4.1532	129.9	0.2842	150
160	4.8821	132.2	0.2907	4.5298	132.2	0.2892	4.3125	132.2	0.2882	4.2244	132.1	0.2878	160
170	4.9638	134.4	0.2942	4.6058	134.4	0.2928	4.3850	134.4	0.2918	4.2955	134.4	0.2914	170
180	5.0453	136.7	0.2978	4.6816	136.7	0.2963	4.4574	136.6	0.2954	4.3664	136.6	0.2950	180
190	5.1268	139.0	0.3013	4.7574	138.9	0.2999	4.5297	138.9	0.2989	4.4373	138.9	0.2985	190
200	5.2082	141.3	0.3048	4.8331	141.2	0.3034	4.6018	141.2	0.3024	4.5080	141.2	0.3020	200
210	5.2894	143.6	0.3083	4.9087	143.6	0.3069	4.6739	143.5	0.3059	4.5787	143.5	0.3055	210
220	5.3706	145.9	0.3118	4.9841	145.9	0.3103	4.7459	145.9	0.3094	4.6492	145.9	0.3090	220
230	5.4517	148.3	0.3152	5.0596	148.3	0.3138	4.8178	148.2	0.3128	4.7197	148.2	0.3124	230
240	5.5327	150.7	0.3187	5.1349	150.6	0.3172	4.8896	150.6	0.3163	4.7901	150.6	0.3159	240
250	5.6137	153.1	0.3221	5.2102	153.0	0.3206	4.9614	153.0	0.3197	4.8605	153.0	0.3193	250
260	5.6946	155.5	0.3255	5.2854	155.5	0.3240	5.0331	155.5	0.3231	4.9307	155.4	0.3227	260
270	5.7754	157.9	0.3288	5.3605	157.9	0.3274	5.1047	157.9	0.3264	5.0010	157.9	0.3260	270

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	16			17			18			19			TEMP. °F
	–16.85			–14.44			–12.15			–9.95			
	V	H	S	V	H	S	V	H	S	V	H	S	
	2.7346	95.9	0.2180	2.5825	96.2	0.2177	2.4468	96.6	0.2174	2.3248	96.9	0.2172	
–10	2.7850	97.2	0.2209	2.6135	97.1	0.2196	2.4610	97.0	0.2184	–	–	–	–10
0	2.8577	99.1	0.2252	2.6825	99.0	0.2239	2.5268	98.9	0.2226	2.3873	98.8	0.2214	0
10	2.9296	101.0	0.2293	2.7506	100.9	0.2280	2.5915	100.9	0.2268	2.4492	100.8	0.2256	10
20	3.0007	103.0	0.2334	2.8180	102.9	0.2321	2.6556	102.8	0.2309	2.5102	102.7	0.2298	20
30	3.0712	104.9	0.2374	2.8848	104.8	0.2362	2.7190	104.8	0.2350	2.5706	104.7	0.2338	30
40	3.1412	106.9	0.2414	2.9510	106.8	0.2402	2.7819	106.8	0.2390	2.6305	106.7	0.2378	40
50	3.2108	108.9	0.2454	3.0167	108.8	0.2441	2.8443	108.8	0.2429	2.6899	108.7	0.2418	50
60	3.2799	110.9	0.2493	3.0821	110.8	0.2480	2.9063	110.8	0.2469	2.7489	110.7	0.2457	60
70	3.3487	112.9	0.2531	3.1471	112.9	0.2519	2.9679	112.8	0.2507	2.8076	112.8	0.2496	70
80	3.4172	115.0	0.2570	3.2118	114.9	0.2557	3.0293	114.9	0.2546	2.8659	114.8	0.2535	80
90	3.4854	117.0	0.2608	3.2763	117.0	0.2596	3.0903	116.9	0.2584	2.9239	116.9	0.2573	90
100	3.5534	119.1	0.2645	3.3404	119.1	0.2633	3.1511	119.0	0.2622	2.9817	119.0	0.2611	100
110	3.6212	121.2	0.2683	3.4044	121.2	0.2671	3.2117	121.2	0.2659	3.0393	121.1	0.2648	110
120	3.6887	123.4	0.2720	3.4681	123.3	0.2708	3.2721	123.3	0.2696	3.0966	123.2	0.2685	120
130	3.7561	125.5	0.2757	3.5317	125.5	0.2745	3.3322	125.4	0.2733	3.1538	125.4	0.2722	130
140	3.8232	127.7	0.2793	3.5951	127.7	0.2781	3.3922	127.6	0.2770	3.2108	127.6	0.2759	140
150	3.8903	129.9	0.2830	3.6583	129.9	0.2818	3.4521	129.8	0.2806	3.2676	129.8	0.2795	150
160	3.9572	132.1	0.2866	3.7214	132.1	0.2854	3.5118	132.0	0.2842	3.3243	132.0	0.2832	160
170	4.0239	134.3	0.2901	3.7844	134.3	0.2889	3.5714	134.3	0.2878	3.3809	134.2	0.2867	170
180	4.0906	136.6	0.2937	3.8472	136.6	0.2925	3.6309	136.5	0.2914	3.4373	136.5	0.2903	180
190	4.1571	138.9	0.2972	3.9099	138.9	0.2960	3.6902	138.8	0.2949	3.4936	138.8	0.2938	190
200	4.2236	141.2	0.3008	3.9726	141.2	0.2996	3.7495	141.1	0.2984	3.5499	141.1	0.2974	200
210	4.2899	143.5	0.3042	4.0351	143.5	0.3031	3.8086	143.4	0.3019	3.6060	143.4	0.3009	210
220	4.3562	145.8	0.3077	4.0976	145.8	0.3065	3.8677	145.8	0.3054	3.6621	145.8	0.3043	220
230	4.4223	148.2	0.3112	4.1599	148.2	0.3100	3.9267	148.2	0.3089	3.7180	148.1	0.3078	230
240	4.4884	150.6	0.3146	4.2222	150.6	0.3134	3.9856	150.5	0.3123	3.7739	150.5	0.3112	240
250	4.5545	153.0	0.3180	4.2845	153.0	0.3168	4.0445	152.9	0.3157	3.8298	152.9	0.3146	250
260	4.6204	155.4	0.3214	4.3466	155.4	0.3202	4.1033	155.4	0.3191	3.8855	155.4	0.3180	260
270	4.6864	157.9	0.3248	4.4088	157.8	0.3236	4.1620	157.8	0.3225	3.9412	157.8	0.3214	270
280	4.7522	160.3	0.3281	4.4708	160.3	0.3269	4.2207	160.3	0.3258	3.9969	160.3	0.3248	280

ABSOLUTE PRESSURE, psia

TEMP. °F	20			21			22			23			TEMP. °F
	–7.84			–5.81			–3.86			–1.98			
	V	H	S	V	H	S	V	H	S	V	H	S	
	2.2147	97.2	0.2169	2.1147	97.5	0.2167	2.0235	97.8	0.2165	1.9399	98.1	0.2163	
0	2.2618	98.7	0.2203	2.1482	98.6	0.2192	2.0449	98.6	0.2182	1.9505	98.5	0.2172	0
10	2.3210	100.7	0.2245	2.2050	100.6	0.2235	2.0995	100.5	0.2224	2.0032	100.4	0.2214	10
20	2.3794	102.7	0.2287	2.2610	102.6	0.2276	2.1533	102.5	0.2266	2.0550	102.4	0.2256	20
30	2.4371	104.6	0.2327	2.3163	104.6	0.2317	2.2064	104.5	0.2307	2.1061	104.4	0.2297	30
40	2.4943	106.6	0.2368	2.3710	106.6	0.2357	2.2590	106.5	0.2347	2.1566	106.4	0.2338	40
50	2.5510	108.6	0.2407	2.4253	108.6	0.2397	2.3110	108.5	0.2387	2.2066	108.5	0.2378	50
60	2.6073	110.7	0.2447	2.4791	110.6	0.2437	2.3626	110.5	0.2427	2.2563	110.5	0.2418	60
70	2.6632	112.7	0.2486	2.5326	112.7	0.2476	2.4139	112.6	0.2466	2.3055	112.5	0.2457	70
80	2.7188	114.8	0.2524	2.5858	114.7	0.2514	2.4648	114.7	0.2505	2.3544	114.6	0.2495	80
90	2.7742	116.8	0.2562	2.6387	116.8	0.2552	2.5155	116.8	0.2543	2.4030	116.7	0.2534	90
100	2.8292	118.9	0.2600	2.6913	118.9	0.2590	2.5659	118.9	0.2581	2.4514	118.8	0.2572	100
110	2.8841	121.1	0.2638	2.7437	121.0	0.2628	2.6160	121.0	0.2619	2.4995	120.9	0.2609	110
120	2.9387	123.2	0.2675	2.7958	123.2	0.2665	2.6660	123.1	0.2656	2.5474	123.1	0.2647	120
130	2.9932	125.4	0.2712	2.8478	125.3	0.2702	2.7157	125.3	0.2693	2.5951	125.3	0.2684	130
140	3.0474	127.6	0.2749	2.8997	127.5	0.2739	2.7653	127.5	0.2730	2.6426	127.4	0.2721	140
150	3.1016	129.8	0.2785	2.9513	129.7	0.2775	2.8147	129.7	0.2766	2.6900	129.6	0.2757	150
160	3.1555	132.0	0.2821	3.0028	131.9	0.2812	2.8640	131.9	0.2802	2.7372	131.9	0.2793	160
170	3.2094	134.2	0.2857	3.0542	134.2	0.2847	2.9131	134.2	0.2838	2.7844	134.1	0.2829	170
180	3.2631	136.5	0.2893	3.1055	136.4	0.2883	2.9622	136.4	0.2874	2.8313	136.4	0.2865	180
190	3.3167	138.8	0.2928	3.1566	138.7	0.2919	3.0111	138.7	0.2909	2.8782	138.7	0.2901	190
200	3.3702	141.1	0.2964	3.2077	141.0	0.2954	3.0599	141.0	0.2945	2.9250	141.0	0.2936	200
210	3.4236	143.4	0.2998	3.2586	143.4	0.2989	3.1086	143.3	0.2980	2.9717	143.3	0.2971	210
220	3.4770	145.7	0.3033	3.3095	145.7	0.3024	3.1572	145.7	0.3014	3.0182	145.7	0.3006	220
230	3.5302	148.1	0.3068	3.3603	148.1	0.3058	3.2058	148.1	0.3049	3.0647	148.0	0.3040	230
240	3.5834	150.5	0.3102	3.4110	150.5	0.3093	3.2543	150.4	0.3083	3.1112	150.4	0.3075	240
250	3.6365	152.9	0.3136	3.4616	152.9	0.3127	3.3027	152.9	0.3118	3.1575	152.8	0.3109	250
260	3.6895	155.3	0.3170	3.5122	155.3	0.3161	3.3510	155.3	0.3152	3.2038	155.3	0.3143	260
270	3.7425	157.8	0.3204	3.5627	157.8	0.3195	3.3993	157.7	0.3185	3.2501	157.7	0.3177	270
280	3.7954	160.2	0.3238	3.6132	160.2	0.3228	3.4475	160.2	0.3219	3.2962	160.2	0.3210	280
290	3.8483	162.7	0.3271	3.6636	162.7	0.3262	3.4957	162.7	0.3252	3.3424	162.7	0.3244	290

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	24			25			26			27			TEMP. °F
	–0.16			1.61			3.32			4.97			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.8631	98.3	0.2161	1.7922	98.6	0.2160	1.7266	98.9	0.2158	1.6657	99.1	0.2157	
0	1.8639	98.4	0.2162	–	–	–	–	–	–	–	–	–	0
10	1.9148	100.4	0.2205	1.8335	100.3	0.2196	1.7584	100.2	0.2187	1.6889	100.1	0.2178	10
20	1.9648	102.4	0.2247	1.8819	102.3	0.2238	1.8052	102.2	0.2229	1.7343	102.1	0.2221	20
30	2.0141	104.4	0.2288	1.9295	104.3	0.2279	1.8513	104.2	0.2271	1.7789	104.1	0.2262	30
40	2.0628	106.4	0.2329	1.9764	106.3	0.2320	1.8967	106.2	0.2311	1.8229	106.2	0.2303	40
50	2.1110	108.4	0.2369	2.0229	108.3	0.2360	1.9417	108.3	0.2352	1.8664	108.2	0.2344	50
60	2.1587	110.4	0.2409	2.0690	110.4	0.2400	1.9861	110.3	0.2392	1.9094	110.3	0.2384	60
70	2.2061	112.5	0.2448	2.1146	112.4	0.2439	2.0302	112.4	0.2431	1.9520	112.3	0.2423	70
80	2.2531	114.6	0.2487	2.1600	114.5	0.2478	2.0740	114.5	0.2470	1.9943	114.4	0.2462	80
90	2.2999	116.7	0.2525	2.2050	116.6	0.2516	2.1174	116.6	0.2508	2.0363	116.5	0.2500	90
100	2.3464	118.8	0.2563	2.2498	118.7	0.2555	2.1606	118.7	0.2546	2.0781	118.6	0.2539	100
110	2.3926	120.9	0.2601	2.2943	120.9	0.2592	2.2036	120.8	0.2584	2.1195	120.8	0.2576	110
120	2.4387	123.0	0.2638	2.3386	123.0	0.2630	2.2463	123.0	0.2622	2.1608	122.9	0.2614	120
130	2.4845	125.2	0.2675	2.3828	125.2	0.2667	2.2888	125.1	0.2659	2.2019	125.1	0.2651	130
140	2.5302	127.4	0.2712	2.4267	127.4	0.2704	2.3312	127.3	0.2696	2.2428	127.3	0.2688	140
150	2.5757	129.6	0.2749	2.4705	129.6	0.2740	2.3734	129.5	0.2732	2.2835	129.5	0.2725	150
160	2.6211	131.8	0.2785	2.5142	131.8	0.2777	2.4155	131.8	0.2769	2.3241	131.7	0.2761	160
170	2.6663	134.1	0.2821	2.5577	134.1	0.2813	2.4574	134.0	0.2805	2.3646	134.0	0.2797	170
180	2.7114	136.4	0.2857	2.6011	136.3	0.2848	2.4992	136.3	0.2840	2.4049	136.3	0.2833	180
190	2.7564	138.6	0.2892	2.6443	138.6	0.2884	2.5409	138.6	0.2876	2.4451	138.6	0.2868	190
200	2.8013	141.0	0.2927	2.6875	140.9	0.2919	2.5825	140.9	0.2911	2.4852	140.9	0.2904	200
210	2.8461	143.3	0.2962	2.7306	143.3	0.2954	2.6240	143.2	0.2946	2.5252	143.2	0.2939	210
220	2.8908	145.6	0.2997	2.7736	145.6	0.2989	2.6654	145.6	0.2981	2.5652	145.6	0.2974	220
230	2.9354	148.0	0.3032	2.8165	148.0	0.3024	2.7067	148.0	0.3016	2.6050	147.9	0.3008	230
240	2.9800	150.4	0.3066	2.8593	150.4	0.3058	2.7479	150.3	0.3050	2.6448	150.3	0.3043	240
250	3.0245	152.8	0.3100	2.9021	152.8	0.3092	2.7891	152.8	0.3085	2.6845	152.7	0.3077	250
260	3.0689	155.2	0.3134	2.9448	155.2	0.3126	2.8302	155.2	0.3119	2.7241	155.2	0.3111	260
270	3.1133	157.7	0.3168	2.9874	157.7	0.3160	2.8713	157.6	0.3152	2.7637	157.6	0.3145	270
280	3.1576	160.2	0.3202	3.0300	160.1	0.3194	2.9122	160.1	0.3186	2.8032	160.1	0.3179	280
290	3.2018	162.6	0.3235	3.0725	162.6	0.3227	2.9532	162.6	0.3220	2.8427	162.6	0.3212	290

ABSOLUTE PRESSURE, psia

TEMP. °F	28			29			30			31			TEMP. °F
	6.59			8.15			9.68			11.17			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.6090	99.3	0.2155	1.5561	99.6	0.2154	1.5065	99.8	0.2152	1.4601	100.0	0.2151	
10	1.6243	100.0	0.2170	1.5641	99.9	0.2162	1.5079	99.8	0.2154	–	–	–	10
20	1.6684	102.0	0.2212	1.6070	102.0	0.2204	1.5497	101.9	0.2197	1.4960	101.8	0.2189	20
30	1.7117	104.1	0.2254	1.6491	104.0	0.2246	1.5906	103.9	0.2239	1.5359	103.8	0.2231	30
40	1.7544	106.1	0.2295	1.6905	106.0	0.2288	1.6309	106.0	0.2280	1.5751	105.9	0.2273	40
50	1.7965	108.1	0.2336	1.7314	108.1	0.2328	1.6706	108.0	0.2321	1.6138	108.0	0.2313	50
60	1.8382	110.2	0.2376	1.7718	110.1	0.2368	1.7099	110.1	0.2361	1.6519	110.0	0.2354	60
70	1.8794	112.3	0.2415	1.8118	112.2	0.2408	1.7487	112.2	0.2400	1.6897	112.1	0.2393	70
80	1.9204	114.4	0.2454	1.8515	114.3	0.2447	1.7872	114.3	0.2440	1.7271	114.2	0.2433	80
90	1.9610	116.5	0.2493	1.8909	116.4	0.2485	1.8254	116.4	0.2478	1.7642	116.3	0.2471	90
100	2.0014	118.6	0.2531	1.9300	118.5	0.2524	1.8634	118.5	0.2517	1.8010	118.4	0.2510	100
110	2.0415	120.7	0.2569	1.9689	120.7	0.2562	1.9010	120.6	0.2555	1.8376	120.6	0.2548	110
120	2.0814	122.9	0.2606	2.0075	122.8	0.2599	1.9385	122.8	0.2592	1.8739	122.8	0.2585	120
130	2.1211	125.1	0.2644	2.0459	125.0	0.2636	1.9758	125.0	0.2629	1.9101	124.9	0.2623	130
140	2.1607	127.2	0.2681	2.0842	127.2	0.2673	2.0128	127.2	0.2666	1.9461	127.1	0.2660	140
150	2.2000	129.5	0.2717	2.1223	129.4	0.2710	2.0498	129.4	0.2703	1.9819	129.4	0.2696	150
160	2.2393	131.7	0.2754	2.1603	131.7	0.2746	2.0865	131.6	0.2740	2.0175	131.6	0.2733	160
170	2.2783	134.0	0.2790	2.1981	133.9	0.2783	2.1232	133.9	0.2776	2.0531	133.9	0.2769	170
180	2.3173	136.2	0.2826	2.2358	136.2	0.2818	2.1597	136.2	0.2812	2.0885	136.1	0.2805	180
190	2.3562	138.5	0.2861	2.2733	138.5	0.2854	2.1961	138.5	0.2847	2.1237	138.4	0.2841	190
200	2.3949	140.8	0.2896	2.3108	140.8	0.2889	2.2323	140.8	0.2883	2.1589	140.7	0.2876	200
210	2.4336	143.2	0.2932	2.3482	143.1	0.2925	2.2685	143.1	0.2918	2.1940	143.1	0.2911	210
220	2.4721	145.5	0.2966	2.3855	145.5	0.2959	2.3046	145.5	0.2953	2.2290	145.4	0.2946	220
230	2.5106	147.9	0.3001	2.4227	147.9	0.2994	2.3407	147.8	0.2987	2.2639	147.8	0.2981	230
240	2.5490	150.3	0.3036	2.4598	150.3	0.3029	2.3766	150.2	0.3022	2.2987	150.2	0.3015	240
250	2.5873	152.7	0.3070	2.4969	152.7	0.3063	2.4125	152.7	0.3056	2.3335	152.6	0.3050	250
260	2.6256	155.1	0.3104	2.5339	155.1	0.3097	2.4483	155.1	0.3090	2.3682	155.1	0.3084	260
270	2.6638	157.6	0.3138	2.5708	157.6	0.3131	2.4840	157.6	0.3124	2.4028	157.5	0.3118	270
280	2.7020	160.1	0.3172	2.6077	160.0	0.3165	2.5197	160.0	0.3158	2.4374	160.0	0.3151	280
290	2.7400	162.6	0.3205	2.6445	162.5	0.3198	2.5553	162.5	0.3191	2.4719	162.5	0.3185	290
300	2.7781	165.1	0.3238	2.6813	165.1	0.3231	2.5909	165.0	0.3225	2.5064	165.0	0.3218	300

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	32			33			34			35			TEMP. °F
	12.62			14.03			15.42			16.77			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.4165	100.2	0.2150	1.3754	100.4	0.2149	1.3366	100.6	0.2148	1.3000	100.8	0.2147	
20	1.4457	101.7	0.2182	1.3985	101.6	0.2175	1.3539	101.6	0.2168	1.3119	101.5	0.2161	20
30	1.4846	103.8	0.2224	1.4364	103.7	0.2217	1.3910	103.6	0.2210	1.3482	103.5	0.2203	30
40	1.5228	105.8	0.2266	1.4737	105.8	0.2259	1.4274	105.7	0.2252	1.3838	105.6	0.2245	40
50	1.5605	107.9	0.2306	1.5104	107.8	0.2300	1.4632	107.8	0.2293	1.4187	107.7	0.2286	50
60	1.5976	110.0	0.2347	1.5466	109.9	0.2340	1.4985	109.8	0.2333	1.4532	109.8	0.2327	60
70	1.6343	112.0	0.2386	1.5823	112.0	0.2380	1.5334	111.9	0.2373	1.4872	111.9	0.2367	70
80	1.6707	114.1	0.2426	1.6178	114.1	0.2419	1.5679	114.0	0.2413	1.5209	114.0	0.2406	80
90	1.7068	116.3	0.2465	1.6528	116.2	0.2458	1.6021	116.2	0.2452	1.5542	116.1	0.2445	90
100	1.7426	118.4	0.2503	1.6877	118.3	0.2497	1.6360	118.3	0.2490	1.5872	118.3	0.2484	100
110	1.7781	120.5	0.2541	1.7222	120.5	0.2535	1.6696	120.5	0.2528	1.6200	120.4	0.2522	110
120	1.8134	122.7	0.2579	1.7566	122.7	0.2572	1.7031	122.6	0.2566	1.6526	122.6	0.2560	120
130	1.8485	124.9	0.2616	1.7907	124.9	0.2610	1.7363	124.8	0.2604	1.6850	124.8	0.2597	130
140	1.8835	127.1	0.2653	1.8247	127.1	0.2647	1.7693	127.0	0.2641	1.7172	127.0	0.2635	140
150	1.9183	129.3	0.2690	1.8585	129.3	0.2684	1.8022	129.2	0.2677	1.7492	129.2	0.2671	150
160	1.9529	131.6	0.2726	1.8921	131.5	0.2720	1.8349	131.5	0.2714	1.7810	131.5	0.2708	160
170	1.9874	133.8	0.2763	1.9256	133.8	0.2756	1.8675	133.8	0.2750	1.8127	133.7	0.2744	170
180	2.0217	136.1	0.2799	1.9590	136.1	0.2792	1.9000	136.0	0.2786	1.8443	136.0	0.2780	180
190	2.0560	138.4	0.2834	1.9923	138.4	0.2828	1.9323	138.3	0.2822	1.8758	138.3	0.2816	190
200	2.0901	140.7	0.2870	2.0254	140.7	0.2863	1.9646	140.7	0.2857	1.9072	140.6	0.2851	200
210	2.1241	143.1	0.2905	2.0585	143.0	0.2899	1.9967	143.0	0.2893	1.9385	143.0	0.2887	210
220	2.1581	145.4	0.2940	2.0915	145.4	0.2934	2.0288	145.4	0.2928	1.9697	145.3	0.2922	220
230	2.1920	147.8	0.2974	2.1244	147.8	0.2968	2.0607	147.7	0.2962	2.0008	147.7	0.2956	230
240	2.2257	150.2	0.3009	2.1572	150.2	0.3003	2.0926	150.1	0.2997	2.0318	150.1	0.2991	240
250	2.2595	152.6	0.3043	2.1899	152.6	0.3037	2.1244	152.6	0.3031	2.0627	152.5	0.3025	250
260	2.2931	155.0	0.3077	2.2226	155.0	0.3071	2.1562	155.0	0.3065	2.0936	155.0	0.3060	260
270	2.3267	157.5	0.3111	2.2552	157.5	0.3105	2.1879	157.5	0.3099	2.1244	157.4	0.3093	270
280	2.3602	160.0	0.3145	2.2877	160.0	0.3139	2.2195	159.9	0.3133	2.1552	159.9	0.3127	280
290	2.3937	162.5	0.3179	2.3202	162.5	0.3172	2.2511	162.4	0.3167	2.1859	162.4	0.3161	290
300	2.4271	165.0	0.3212	2.3527	165.0	0.3206	2.2826	165.0	0.3200	2.2166	164.9	0.3194	300
310	2.4605	167.5	0.3245	2.3851	167.5	0.3239	2.3141	167.5	0.3233	2.2472	167.5	0.3227	310

ABSOLUTE PRESSURE, psia

TEMP. °F	36			37			38			39			TEMP. °F
	18.09			19.38			20.65			21.89			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.2654	101.0	0.2146	1.2325	101.2	0.2145	1.2014	101.4	0.2144	1.1717	101.5	0.2143	
20	1.2723	101.4	0.2154	1.2347	101.3	0.2147	–	–	–	–	–	–	20
30	1.3078	103.5	0.2197	1.2695	103.4	0.2190	1.2333	103.3	0.2184	1.1988	103.2	0.2178	30
40	1.3426	105.6	0.2239	1.3036	105.5	0.2233	1.2666	105.4	0.2226	1.2315	105.3	0.2220	40
50	1.3767	107.6	0.2280	1.3370	107.6	0.2274	1.2993	107.5	0.2268	1.2636	107.4	0.2262	50
60	1.4104	109.7	0.2321	1.3699	109.7	0.2315	1.3315	109.6	0.2309	1.2951	109.5	0.2303	60
70	1.4436	111.8	0.2361	1.4024	111.8	0.2355	1.3633	111.7	0.2349	1.3262	111.7	0.2343	70
80	1.4765	113.9	0.2400	1.4344	113.9	0.2394	1.3946	113.8	0.2388	1.3569	113.8	0.2383	80
90	1.5090	116.1	0.2439	1.4662	116.0	0.2433	1.4257	116.0	0.2428	1.3872	115.9	0.2422	90
100	1.5412	118.2	0.2478	1.4977	118.2	0.2472	1.4564	118.1	0.2466	1.4173	118.1	0.2461	100
110	1.5732	120.4	0.2516	1.5289	120.3	0.2510	1.4869	120.3	0.2505	1.4471	120.2	0.2499	110
120	1.6050	122.5	0.2554	1.5599	122.5	0.2548	1.5172	122.5	0.2543	1.4766	122.4	0.2537	120
130	1.6365	124.7	0.2592	1.5906	124.7	0.2586	1.5472	124.7	0.2580	1.5060	124.6	0.2575	130
140	1.6679	126.9	0.2629	1.6212	126.9	0.2623	1.5771	126.9	0.2617	1.5352	126.8	0.2612	140
150	1.6991	129.2	0.2666	1.6517	129.1	0.2660	1.6068	129.1	0.2654	1.5642	129.1	0.2649	150
160	1.7301	131.4	0.2702	1.6819	131.4	0.2697	1.6363	131.3	0.2691	1.5930	131.3	0.2686	160
170	1.7610	133.7	0.2738	1.7121	133.7	0.2733	1.6657	133.6	0.2727	1.6217	133.6	0.2722	170
180	1.7918	136.0	0.2774	1.7421	135.9	0.2769	1.6950	135.9	0.2763	1.6503	135.9	0.2758	180
190	1.8224	138.3	0.2810	1.7720	138.2	0.2805	1.7241	138.2	0.2799	1.6787	138.2	0.2794	190
200	1.8530	140.6	0.2846	1.8017	140.6	0.2840	1.7532	140.5	0.2835	1.7071	140.5	0.2829	200
210	1.8835	142.9	0.2881	1.8314	142.9	0.2875	1.7821	142.9	0.2870	1.7353	142.9	0.2865	210
220	1.9138	145.3	0.2916	1.8610	145.3	0.2910	1.8110	145.3	0.2905	1.7635	145.2	0.2900	220
230	1.9441	147.7	0.2951	1.8905	147.7	0.2945	1.8397	147.6	0.2940	1.7916	147.6	0.2935	230
240	1.9743	150.1	0.2985	1.9199	150.1	0.2980	1.8684	150.0	0.2974	1.8196	150.0	0.2969	240
250	2.0044	152.5	0.3020	1.9493	152.5	0.3014	1.8971	152.5	0.3009	1.8475	152.4	0.3004	250
260	2.0345	155.0	0.3054	1.9786	154.9	0.3048	1.9256	154.9	0.3043	1.8753	154.9	0.3038	260
270	2.0645	157.4	0.3088	2.0078	157.4	0.3082	1.9541	157.4	0.3077	1.9031	157.3	0.3072	270
280	2.0944	159.9	0.3122	2.0370	159.9	0.3116	1.9825	159.9	0.3111	1.9309	159.8	0.3106	280
290	2.1243	162.4	0.3155	2.0661	162.4	0.3150	2.0109	162.4	0.3144	1.9586	162.3	0.3139	290
300	2.1542	164.9	0.3189	2.0951	164.9	0.3183	2.0392	164.9	0.3178	1.9862	164.9	0.3173	300
310	2.1840	167.5	0.3222	2.1242	167.4	0.3216	2.0675	167.4	0.3211	2.0138	167.4	0.3206	310

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	40			41			42			43			TEMP. °F
	23.11			24.30			25.48			26.63			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.1435	101.7	0.2142	1.1167	101.9	0.2141	1.0910	102.0	0.2140	1.0665	102.2	0.2140	
30	1.1661	103.2	0.2172	1.1350	103.1	0.2166	1.1053	103.0	0.2160	1.0770	102.9	0.2154	30
40	1.1982	105.3	0.2214	1.1665	105.2	0.2209	1.1362	105.1	0.2203	1.1074	105.1	0.2197	40
50	1.2296	107.4	0.2256	1.1973	107.3	0.2250	1.1665	107.2	0.2245	1.1371	107.2	0.2239	50
60	1.2605	109.5	0.2297	1.2276	109.4	0.2291	1.1962	109.4	0.2286	1.1663	109.3	0.2281	60
70	1.2909	111.6	0.2337	1.2574	111.5	0.2332	1.2255	111.5	0.2326	1.1950	111.4	0.2321	70
80	1.3210	113.7	0.2377	1.2868	113.7	0.2372	1.2543	113.6	0.2366	1.2233	113.6	0.2361	80
90	1.3507	115.9	0.2416	1.3159	115.8	0.2411	1.2828	115.8	0.2406	1.2512	115.7	0.2401	90
100	1.3801	118.0	0.2455	1.3447	118.0	0.2450	1.3110	117.9	0.2445	1.2788	117.9	0.2440	100
110	1.4092	120.2	0.2494	1.3732	120.1	0.2488	1.3389	120.1	0.2483	1.3062	120.0	0.2478	110
120	1.4381	122.4	0.2532	1.4015	122.3	0.2526	1.3666	122.3	0.2521	1.3333	122.2	0.2516	120
130	1.4668	124.6	0.2569	1.4296	124.5	0.2564	1.3941	124.5	0.2559	1.3603	124.4	0.2554	130
140	1.4953	126.8	0.2607	1.4575	126.7	0.2601	1.4214	126.7	0.2596	1.3870	126.7	0.2591	140
150	1.5237	129.0	0.2644	1.4852	129.0	0.2638	1.4485	129.0	0.2633	1.4135	128.9	0.2628	150
160	1.5519	131.3	0.2680	1.5127	131.2	0.2675	1.4755	131.2	0.2670	1.4399	131.2	0.2665	160
170	1.5799	133.6	0.2717	1.5402	133.5	0.2712	1.5023	133.5	0.2707	1.4662	133.5	0.2702	170
180	1.6078	135.8	0.2753	1.5674	135.8	0.2748	1.5290	135.8	0.2743	1.4923	135.7	0.2738	180
190	1.6356	138.2	0.2789	1.5946	138.1	0.2784	1.5555	138.1	0.2779	1.5183	138.1	0.2774	190
200	1.6633	140.5	0.2824	1.6217	140.5	0.2819	1.5820	140.4	0.2814	1.5442	140.4	0.2809	200
210	1.6909	142.8	0.2860	1.6486	142.8	0.2855	1.6084	142.8	0.2850	1.5700	142.7	0.2845	210
220	1.7184	145.2	0.2895	1.6755	145.2	0.2890	1.6346	145.1	0.2885	1.5957	145.1	0.2880	220
230	1.7458	147.6	0.2930	1.7023	147.6	0.2924	1.6608	147.5	0.2920	1.6213	147.5	0.2915	230
240	1.7731	150.0	0.2964	1.7290	150.0	0.2959	1.6869	149.9	0.2954	1.6468	149.9	0.2949	240
250	1.8004	152.4	0.2999	1.7556	152.4	0.2994	1.7130	152.4	0.2989	1.6723	152.3	0.2984	250
260	1.8276	154.9	0.3033	1.7822	154.8	0.3028	1.7389	154.8	0.3023	1.6977	154.8	0.3018	260
270	1.8547	157.3	0.3067	1.8087	157.3	0.3062	1.7648	157.3	0.3057	1.7230	157.3	0.3052	270
280	1.8818	159.8	0.3101	1.8351	159.8	0.3096	1.7907	159.8	0.3091	1.7483	159.7	0.3086	280
290	1.9088	162.3	0.3134	1.8615	162.3	0.3129	1.8165	162.3	0.3124	1.7735	162.2	0.3120	290
300	1.9358	164.8	0.3168	1.8878	164.8	0.3163	1.8422	164.8	0.3158	1.7987	164.8	0.3153	300
310	1.9627	167.4	0.3201	1.9141	167.4	0.3196	1.8679	167.3	0.3191	1.8238	167.3	0.3186	310
320	1.9896	169.9	0.3234	1.9404	169.9	0.3229	1.8935	169.9	0.3224	1.8488	169.9	0.3219	320

ABSOLUTE PRESSURE, psia

TEMP. °F	44			45			46			47			TEMP. °F
	27.76			28.87			29.96			31.04			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.0431	102.4	0.2139	1.0207	102.5	0.2138	0.9992	102.7	0.2137	0.9787	102.8	0.2137	
30	1.0500	102.8	0.2149	1.0241	102.8	0.2143	0.9994	102.7	0.2138	–	–	–	30
40	1.0799	105.0	0.2192	1.0536	104.9	0.2186	1.0284	104.8	0.2181	1.0043	104.8	0.2176	40
50	1.1091	107.1	0.2234	1.0823	107.0	0.2229	1.0567	107.0	0.2223	1.0321	106.9	0.2218	50
60	1.1377	109.2	0.2275	1.1105	109.2	0.2270	1.0843	109.1	0.2265	1.0593	109.0	0.2260	60
70	1.1659	111.4	0.2316	1.1381	111.3	0.2311	1.1115	111.2	0.2306	1.0860	111.2	0.2301	70
80	1.1937	113.5	0.2356	1.1654	113.5	0.2351	1.1383	113.4	0.2346	1.1124	113.3	0.2341	80
90	1.2211	115.7	0.2395	1.1923	115.6	0.2390	1.1647	115.6	0.2386	1.1383	115.5	0.2381	90
100	1.2482	117.8	0.2434	1.2188	117.8	0.2430	1.1908	117.7	0.2425	1.1639	117.7	0.2420	100
110	1.2750	120.0	0.2473	1.2452	120.0	0.2468	1.2166	119.9	0.2463	1.1893	119.9	0.2459	110
120	1.3016	122.2	0.2511	1.2712	122.2	0.2506	1.2422	122.1	0.2502	1.2144	122.1	0.2497	120
130	1.3280	124.4	0.2549	1.2971	124.4	0.2544	1.2676	124.3	0.2540	1.2393	124.3	0.2535	130
140	1.3541	126.6	0.2587	1.3228	126.6	0.2582	1.2927	126.6	0.2577	1.2640	126.5	0.2572	140
150	1.3802	128.9	0.2624	1.3483	128.8	0.2619	1.3177	128.8	0.2614	1.2885	128.8	0.2610	150
160	1.4060	131.1	0.2660	1.3736	131.1	0.2656	1.3426	131.1	0.2651	1.3129	131.0	0.2647	160
170	1.4317	133.4	0.2697	1.3988	133.4	0.2692	1.3673	133.3	0.2688	1.3371	133.3	0.2683	170
180	1.4573	135.7	0.2733	1.4238	135.7	0.2728	1.3918	135.6	0.2724	1.3612	135.6	0.2719	180
190	1.4827	138.0	0.2769	1.4488	138.0	0.2764	1.4163	138.0	0.2760	1.3852	137.9	0.2755	190
200	1.5081	140.4	0.2805	1.4736	140.3	0.2800	1.4406	140.3	0.2795	1.4090	140.3	0.2791	200
210	1.5333	142.7	0.2840	1.4983	142.7	0.2835	1.4648	142.7	0.2831	1.4328	142.6	0.2826	210
220	1.5585	145.1	0.2875	1.5230	145.1	0.2871	1.4890	145.0	0.2866	1.4564	145.0	0.2862	220
230	1.5836	147.5	0.2910	1.5475	147.5	0.2906	1.5130	147.4	0.2901	1.4800	147.4	0.2897	230
240	1.6086	149.9	0.2945	1.5720	149.9	0.2940	1.5370	149.8	0.2936	1.5035	149.8	0.2931	240
250	1.6335	152.3	0.2979	1.5964	152.3	0.2975	1.5609	152.3	0.2970	1.5269	152.2	0.2966	250
260	1.6583	154.8	0.3014	1.6207	154.7	0.3009	1.5847	154.7	0.3005	1.5503	154.7	0.3000	260
270	1.6831	157.2	0.3048	1.6450	157.2	0.3043	1.6085	157.2	0.3039	1.5735	157.2	0.3034	270
280	1.7078	159.7	0.3081	1.6692	159.7	0.3077	1.6322	159.7	0.3072	1.5968	159.7	0.3068	280
290	1.7325	162.2	0.3115	1.6933	162.2	0.3111	1.6558	162.2	0.3106	1.6199	162.2	0.3102	290
300	1.7571	164.7	0.3149	1.7174	164.7	0.3144	1.6794	164.7	0.3140	1.6431	164.7	0.3135	300
310	1.7817	167.3	0.3182	1.7414	167.3	0.3177	1.7030	167.3	0.3173	1.6661	167.2	0.3169	310
320	1.8062	169.9	0.3215	1.7655	169.8	0.3210	1.7265	169.8	0.3206	1.6892	169.8	0.3202	320

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	48			49			50			55			TEMP. °F
	32.09			33.13			34.16			39.05			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.9589	103.0	0.2136	0.9399	103.1	0.2135	0.9217	103.3	0.2135	0.8401	103.9	0.2132	
40	0.9811	104.7	0.2171	0.9589	104.6	0.2165	0.9376	104.5	0.2160	0.8425	104.1	0.2136	40
50	1.0085	106.8	0.2213	0.9860	106.8	0.2208	0.9643	106.7	0.2203	0.8675	106.3	0.2180	50
60	1.0353	109.0	0.2255	1.0123	108.9	0.2250	0.9902	108.9	0.2245	0.8917	108.5	0.2222	60
70	1.0616	111.1	0.2296	1.0382	111.1	0.2291	1.0157	111.0	0.2286	0.9155	110.7	0.2264	70
80	1.0875	113.3	0.2336	1.0637	113.2	0.2332	1.0408	113.2	0.2327	0.9387	112.9	0.2305	80
90	1.1130	115.5	0.2376	1.0887	115.4	0.2371	1.0654	115.3	0.2367	0.9616	115.1	0.2345	90
100	1.1382	117.6	0.2415	1.1135	117.6	0.2411	1.0898	117.5	0.2406	0.9841	117.3	0.2385	100
110	1.1631	119.8	0.2454	1.1380	119.8	0.2449	1.1139	119.7	0.2445	1.0064	119.5	0.2424	110
120	1.1878	122.0	0.2492	1.1622	122.0	0.2488	1.1377	121.9	0.2483	1.0283	121.7	0.2462	120
130	1.2122	124.2	0.2530	1.1862	124.2	0.2526	1.1613	124.2	0.2521	1.0501	124.0	0.2501	130
140	1.2365	126.5	0.2568	1.2100	126.4	0.2563	1.1847	126.4	0.2559	1.0716	126.2	0.2538	140
150	1.2605	128.7	0.2605	1.2337	128.7	0.2601	1.2079	128.7	0.2596	1.0930	128.5	0.2576	150
160	1.2844	131.0	0.2642	1.2571	131.0	0.2638	1.2309	130.9	0.2633	1.1142	130.7	0.2613	160
170	1.3082	133.3	0.2679	1.2805	133.2	0.2674	1.2538	133.2	0.2670	1.1352	133.0	0.2650	170
180	1.3318	135.6	0.2715	1.3037	135.6	0.2711	1.2766	135.5	0.2706	1.1561	135.4	0.2686	180
190	1.3553	137.9	0.2751	1.3267	137.9	0.2747	1.2993	137.8	0.2742	1.1769	137.7	0.2722	190
200	1.3787	140.2	0.2787	1.3497	140.2	0.2782	1.3218	140.2	0.2778	1.1976	140.0	0.2758	200
210	1.4020	142.6	0.2822	1.3726	142.6	0.2818	1.3443	142.5	0.2814	1.2182	142.4	0.2794	210
220	1.4252	145.0	0.2857	1.3953	145.0	0.2853	1.3666	144.9	0.2849	1.2386	144.8	0.2829	220
230	1.4484	147.4	0.2892	1.4180	147.3	0.2888	1.3889	147.3	0.2884	1.2590	147.2	0.2864	230
240	1.4714	149.8	0.2927	1.4406	149.8	0.2923	1.4110	149.7	0.2919	1.2793	149.6	0.2899	240
250	1.4943	152.2	0.2962	1.4631	152.2	0.2957	1.4331	152.2	0.2953	1.2996	152.0	0.2934	250
260	1.5172	154.7	0.2996	1.4856	154.6	0.2992	1.4552	154.6	0.2988	1.3197	154.5	0.2968	260
270	1.5401	157.1	0.3030	1.5080	157.1	0.3026	1.4771	157.1	0.3022	1.3398	157.0	0.3002	270
280	1.5628	159.6	0.3064	1.5303	159.6	0.3060	1.4990	159.6	0.3056	1.3598	159.5	0.3036	280
290	1.5855	162.1	0.3098	1.5526	162.1	0.3093	1.5209	162.1	0.3089	1.3798	162.0	0.3070	290
300	1.6082	164.7	0.3131	1.5748	164.6	0.3127	1.5427	164.6	0.3123	1.3997	164.5	0.3104	300
310	1.6308	167.2	0.3164	1.5970	167.2	0.3160	1.5644	167.2	0.3156	1.4196	167.1	0.3137	310
320	1.6534	169.8	0.3197	1.6191	169.8	0.3193	1.5861	169.7	0.3189	1.4394	169.6	0.3170	320
330	1.6759	172.4	0.3230	1.6412	172.3	0.3226	1.6078	172.3	0.3222	1.4592	172.2	0.3203	330

ABSOLUTE PRESSURE, psia

TEMP. °F	60			65			70			75			TEMP. °F
	43.62			47.91			51.95			55.78			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.7716	104.6	0.2129	0.7133	105.1	0.2127	0.6631	105.7	0.2125	0.6193	106.2	0.2124	
50	0.7866	106.0	0.2158	0.7180	105.6	0.2137	–	–	–	–	–	–	50
60	0.8095	108.2	0.2201	0.7397	107.9	0.2180	0.6798	107.5	0.2161	0.6277	107.1	0.2142	60
70	0.8318	110.4	0.2243	0.7609	110.1	0.2223	0.6999	109.8	0.2204	0.6470	109.4	0.2186	70
80	0.8536	112.6	0.2284	0.7814	112.3	0.2265	0.7195	112.0	0.2246	0.6657	111.7	0.2229	80
90	0.8750	114.8	0.2325	0.8016	114.5	0.2306	0.7386	114.3	0.2288	0.6839	114.0	0.2271	90
100	0.8960	117.0	0.2365	0.8213	116.8	0.2346	0.7573	116.5	0.2328	0.7017	116.3	0.2312	100
110	0.9167	119.3	0.2404	0.8408	119.0	0.2386	0.7757	118.8	0.2368	0.7192	118.5	0.2352	110
120	0.9372	121.5	0.2443	0.8600	121.3	0.2425	0.7938	121.0	0.2408	0.7363	120.8	0.2391	120
130	0.9574	123.7	0.2481	0.8789	123.5	0.2463	0.8116	123.3	0.2446	0.7532	123.1	0.2430	130
140	0.9774	126.0	0.2519	0.8976	125.8	0.2501	0.8292	125.6	0.2485	0.7699	125.4	0.2469	140
150	0.9972	128.3	0.2557	0.9162	128.1	0.2539	0.8466	127.9	0.2523	0.7864	127.7	0.2507	150
160	1.0169	130.6	0.2594	0.9345	130.4	0.2577	0.8639	130.2	0.2560	0.8026	130.0	0.2545	160
170	1.0364	132.9	0.2631	0.9527	132.7	0.2614	0.8809	132.5	0.2597	0.8187	132.3	0.2582	170
180	1.0557	135.2	0.2668	0.9707	135.0	0.2650	0.8979	134.9	0.2634	0.8347	134.7	0.2619	180
190	1.0750	137.5	0.2704	0.9887	137.4	0.2687	0.9147	137.2	0.2671	0.8505	137.1	0.2656	190
200	1.0941	139.9	0.2740	1.0065	139.7	0.2723	0.9314	139.6	0.2707	0.8663	139.4	0.2692	200
210	1.1131	142.3	0.2776	1.0242	142.1	0.2759	0.9479	142.0	0.2743	0.8818	141.8	0.2728	210
220	1.1320	144.6	0.2811	1.0418	144.5	0.2794	0.9644	144.4	0.2778	0.8973	144.2	0.2764	220
230	1.1508	147.1	0.2846	1.0593	146.9	0.2829	0.9808	146.8	0.2814	0.9127	146.6	0.2799	230
240	1.1696	149.5	0.2881	1.0767	149.4	0.2864	0.9971	149.2	0.2849	0.9281	149.1	0.2834	240
250	1.1882	151.9	0.2916	1.0940	151.8	0.2899	1.0133	151.7	0.2884	0.9433	151.5	0.2869	250
260	1.2068	154.4	0.2950	1.1113	154.3	0.2934	1.0294	154.1	0.2918	0.9585	154.0	0.2904	260
270	1.2254	156.9	0.2984	1.1285	156.8	0.2968	1.0455	156.6	0.2953	0.9736	156.5	0.2938	270
280	1.2438	159.4	0.3018	1.1457	159.3	0.3002	1.0615	159.1	0.2987	0.9886	159.0	0.2972	280
290	1.2622	161.9	0.3052	1.1628	161.8	0.3036	1.0775	161.7	0.3021	1.0036	161.6	0.3006	290
300	1.2806	164.4	0.3086	1.1798	164.3	0.3070	1.0934	164.2	0.3054	1.0185	164.1	0.3040	300
310	1.2989	167.0	0.3119	1.1968	166.9	0.3103	1.1092	166.8	0.3088	1.0334	166.7	0.3074	310
320	1.3172	169.5	0.3153	1.2137	169.4	0.3136	1.1250	169.4	0.3121	1.0482	169.3	0.3107	320
330	1.3354	172.1	0.3186	1.2306	172.0	0.3169	1.1408	171.9	0.3154	1.0630	171.9	0.3140	330
340	1.3536	174.7	0.3218	1.2475	174.7	0.3202	1.1565	174.6	0.3187	1.0777	174.5	0.3173	340

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	80			85			90			95			TEMP. °F
	59.42			62.89			66.21			69.39			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.5808	106.6	0.2122	0.5467	107.1	0.2120	0.5163	107.5	0.2119	0.4889	107.9	0.2118	
60	0.5819	106.8	0.2125	–	–	–	–	–	–	–	–	–	60
70	0.6006	109.1	0.2169	0.5595	108.8	0.2152	0.5229	108.4	0.2136	0.4899	108.0	0.2120	70
80	0.6186	111.4	0.2212	0.5769	111.1	0.2196	0.5397	110.8	0.2181	0.5064	110.4	0.2165	80
90	0.6360	113.7	0.2254	0.5937	113.4	0.2239	0.5560	113.1	0.2224	0.5221	112.8	0.2209	90
100	0.6530	116.0	0.2296	0.6100	115.7	0.2280	0.5717	115.5	0.2266	0.5374	115.2	0.2252	100
110	0.6697	118.3	0.2336	0.6260	118.0	0.2321	0.5871	117.8	0.2307	0.5522	117.5	0.2293	110
120	0.6860	120.6	0.2376	0.6416	120.3	0.2361	0.6021	120.1	0.2347	0.5667	119.9	0.2334	120
130	0.7021	122.9	0.2415	0.6570	122.7	0.2401	0.6168	122.4	0.2387	0.5809	122.2	0.2374	130
140	0.7180	125.2	0.2454	0.6721	125.0	0.2440	0.6313	124.8	0.2426	0.5948	124.5	0.2413	140
150	0.7336	127.5	0.2492	0.6870	127.3	0.2478	0.6456	127.1	0.2465	0.6085	126.9	0.2452	150
160	0.7490	129.8	0.2530	0.7017	129.6	0.2516	0.6596	129.4	0.2503	0.6219	129.3	0.2491	160
170	0.7643	132.2	0.2568	0.7162	132.0	0.2554	0.6735	131.8	0.2541	0.6352	131.6	0.2528	170
180	0.7794	134.5	0.2605	0.7306	134.4	0.2591	0.6872	134.2	0.2578	0.6484	134.0	0.2566	180
190	0.7944	136.9	0.2642	0.7449	136.7	0.2628	0.7008	136.6	0.2615	0.6614	136.4	0.2603	190
200	0.8093	139.3	0.2678	0.7590	139.1	0.2665	0.7143	139.0	0.2652	0.6742	138.8	0.2640	200
210	0.8240	141.7	0.2714	0.7730	141.5	0.2701	0.7276	141.4	0.2688	0.6870	141.2	0.2676	210
220	0.8387	144.1	0.2750	0.7869	143.9	0.2737	0.7408	143.8	0.2724	0.6996	143.7	0.2712	220
230	0.8532	146.5	0.2785	0.8007	146.4	0.2772	0.7540	146.2	0.2760	0.7121	146.1	0.2748	230
240	0.8677	149.0	0.2821	0.8144	148.8	0.2808	0.7670	148.7	0.2795	0.7246	148.6	0.2783	240
250	0.8821	151.4	0.2855	0.8280	151.3	0.2843	0.7800	151.2	0.2830	0.7370	151.0	0.2819	250
260	0.8964	153.9	0.2890	0.8416	153.8	0.2877	0.7928	153.7	0.2865	0.7492	153.5	0.2854	260
270	0.9106	156.4	0.2925	0.8550	156.3	0.2912	0.8057	156.2	0.2900	0.7615	156.1	0.2888	270
280	0.9248	158.9	0.2959	0.8685	158.8	0.2946	0.8184	158.7	0.2934	0.7736	158.6	0.2923	280
290	0.9389	161.5	0.2993	0.8818	161.3	0.2980	0.8311	161.2	0.2968	0.7857	161.1	0.2957	290
300	0.9530	164.0	0.3027	0.8951	163.9	0.3014	0.8437	163.8	0.3002	0.7977	163.7	0.2991	300
310	0.9670	166.6	0.3060	0.9084	166.5	0.3048	0.8563	166.4	0.3036	0.8097	166.3	0.3024	310
320	0.9809	169.2	0.3094	0.9216	169.1	0.3081	0.8688	169.0	0.3069	0.8216	168.9	0.3058	320
330	0.9949	171.8	0.3127	0.9348	171.7	0.3114	0.8813	171.6	0.3103	0.8335	171.5	0.3091	330
340	1.0087	174.4	0.3160	0.9479	174.3	0.3147	0.8938	174.2	0.3136	0.8454	174.1	0.3124	340
350	1.0226	177.0	0.3193	0.9610	176.9	0.3180	0.9062	176.8	0.3168	0.8572	176.8	0.3157	350

ABSOLUTE PRESSURE, psia

TEMP. °F	100			110			120			130			TEMP. °F
	72.45			78.24			83.64			88.72			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.4642	108.3	0.2116	0.4212	109.0	0.2114	0.3852	109.6	0.2112	0.3545	110.2	0.2110	
80	0.4762	110.1	0.2151	0.4239	109.4	0.2122	–	–	–	–	–	–	80
90	0.4916	112.5	0.2195	0.4387	111.9	0.2168	0.3942	111.2	0.2141	0.3563	110.5	0.2116	90
100	0.5064	114.9	0.2238	0.4528	114.3	0.2212	0.4078	113.7	0.2186	0.3695	113.1	0.2162	100
110	0.5208	117.3	0.2280	0.4664	116.7	0.2254	0.4208	116.2	0.2230	0.3821	115.6	0.2207	110
120	0.5348	119.6	0.2321	0.4795	119.1	0.2296	0.4334	118.6	0.2272	0.3941	118.1	0.2250	120
130	0.5485	122.0	0.2361	0.4924	121.5	0.2337	0.4455	121.0	0.2314	0.4058	120.5	0.2292	130
140	0.5619	124.3	0.2401	0.5050	123.9	0.2377	0.4574	123.4	0.2355	0.4171	123.0	0.2333	140
150	0.5750	126.7	0.2440	0.5173	126.3	0.2416	0.4690	125.9	0.2395	0.4281	125.4	0.2374	150
160	0.5880	129.1	0.2478	0.5293	128.7	0.2455	0.4804	128.3	0.2434	0.4389	127.9	0.2414	160
170	0.6008	131.4	0.2516	0.5412	131.1	0.2494	0.4915	130.7	0.2473	0.4494	130.3	0.2453	170
180	0.6134	133.8	0.2554	0.5529	133.5	0.2532	0.5025	133.1	0.2511	0.4598	132.8	0.2491	180
190	0.6259	136.2	0.2591	0.5645	135.9	0.2569	0.5133	135.6	0.2549	0.4700	135.2	0.2529	190
200	0.6382	138.6	0.2628	0.5759	138.3	0.2606	0.5240	138.0	0.2586	0.4800	137.7	0.2567	200
210	0.6504	141.1	0.2665	0.5872	140.8	0.2643	0.5345	140.5	0.2623	0.4899	140.1	0.2604	210
220	0.6625	143.5	0.2701	0.5984	143.2	0.2679	0.5450	142.9	0.2660	0.4997	142.6	0.2641	220
230	0.6745	146.0	0.2737	0.6095	145.7	0.2715	0.5553	145.4	0.2696	0.5094	145.1	0.2677	230
240	0.6864	148.4	0.2772	0.6205	148.2	0.2751	0.5655	147.9	0.2732	0.5190	147.6	0.2713	240
250	0.6983	150.9	0.2807	0.6314	150.7	0.2787	0.5756	150.4	0.2767	0.5285	150.1	0.2749	250
260	0.7100	153.4	0.2842	0.6422	153.2	0.2822	0.5857	152.9	0.2802	0.5379	152.7	0.2784	260
270	0.7217	155.9	0.2877	0.6530	155.7	0.2856	0.5957	155.5	0.2837	0.5472	155.2	0.2820	270
280	0.7333	158.5	0.2912	0.6636	158.2	0.2891	0.6056	158.0	0.2872	0.5564	157.8	0.2854	280
290	0.7448	161.0	0.2946	0.6743	160.8	0.2925	0.6154	160.6	0.2907	0.5656	160.3	0.2889	290
300	0.7563	163.6	0.2980	0.6848	163.4	0.2960	0.6252	163.2	0.2941	0.5748	162.9	0.2923	300
310	0.7678	166.2	0.3014	0.6953	166.0	0.2993	0.6349	165.7	0.2975	0.5838	165.5	0.2957	310
320	0.7792	168.8	0.3047	0.7058	168.6	0.3027	0.6446	168.4	0.3008	0.5929	168.2	0.2991	320
330	0.7905	171.4	0.3081	0.7162	171.2	0.3060	0.6543	171.0	0.3042	0.6018	170.8	0.3025	330
340	0.8018	174.0	0.3114	0.7266	173.8	0.3094	0.6638	173.6	0.3075	0.6108	173.5	0.3058	340
350	0.8131	176.7	0.3147	0.7369	176.5	0.3127	0.6734	176.3	0.3108	0.6197	176.1	0.3091	350
360	0.8243	179.3	0.3179	0.7472	179.2	0.3160	0.6829	179.0	0.3141	0.6285	178.8	0.3124	360
370	0.8355	182.0	0.3212	0.7574	181.8	0.3192	0.6924	181.7	0.3174	0.6373	181.5	0.3157	370

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	140			150			160			170			TEMP. °F
	93.51			98.05			102.36			106.48			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.3281	110.7	0.2108	0.3050	111.2	0.2106	0.2847	111.6	0.2104	0.2667	112.0	0.2102	
100	0.3364	112.4	0.2139	0.3074	111.7	0.2116	–	–	–	–	–	–	100
110	0.3487	115.0	0.2184	0.3195	114.4	0.2163	0.2937	113.7	0.2141	0.2708	113.0	0.2120	110
120	0.3603	117.5	0.2229	0.3309	116.9	0.2208	0.3050	116.4	0.2187	0.2819	115.7	0.2167	120
130	0.3716	120.0	0.2271	0.3418	119.5	0.2251	0.3156	119.0	0.2232	0.2923	118.4	0.2213	130
140	0.3824	122.5	0.2313	0.3523	122.0	0.2294	0.3258	121.5	0.2275	0.3023	121.0	0.2257	140
150	0.3930	125.0	0.2354	0.3624	124.5	0.2335	0.3356	124.1	0.2317	0.3118	123.6	0.2300	150
160	0.4032	127.5	0.2394	0.3723	127.0	0.2376	0.3451	126.6	0.2358	0.3211	126.2	0.2341	160
170	0.4133	129.9	0.2434	0.3819	129.5	0.2416	0.3544	129.1	0.2399	0.3300	128.7	0.2382	170
180	0.4231	132.4	0.2473	0.3913	132.0	0.2455	0.3634	131.6	0.2438	0.3387	131.2	0.2422	180
190	0.4328	134.9	0.2511	0.4005	134.5	0.2494	0.3722	134.2	0.2477	0.3472	133.8	0.2461	190
200	0.4423	137.3	0.2549	0.4096	137.0	0.2532	0.3809	136.7	0.2516	0.3555	136.3	0.2500	200
210	0.4517	139.8	0.2586	0.4185	139.5	0.2570	0.3894	139.2	0.2554	0.3637	138.9	0.2538	210
220	0.4609	142.3	0.2623	0.4272	142.0	0.2607	0.3978	141.7	0.2591	0.3717	141.4	0.2576	220
230	0.4700	144.8	0.2660	0.4359	144.5	0.2644	0.4060	144.2	0.2628	0.3796	143.9	0.2613	230
240	0.4791	147.3	0.2696	0.4445	147.1	0.2680	0.4142	146.8	0.2665	0.3874	146.5	0.2650	240
250	0.4880	149.9	0.2732	0.4529	149.6	0.2716	0.4222	149.3	0.2701	0.3951	149.1	0.2686	250
260	0.4969	152.4	0.2768	0.4613	152.2	0.2752	0.4302	151.9	0.2737	0.4027	151.6	0.2722	260
270	0.5056	155.0	0.2803	0.4696	154.7	0.2787	0.4380	154.5	0.2772	0.4102	154.2	0.2758	270
280	0.5143	157.5	0.2838	0.4778	157.3	0.2822	0.4458	157.1	0.2808	0.4176	156.8	0.2794	280
290	0.5230	160.1	0.2873	0.4859	159.9	0.2857	0.4536	159.7	0.2842	0.4250	159.4	0.2829	290
300	0.5315	162.7	0.2907	0.4940	162.5	0.2892	0.4612	162.3	0.2877	0.4323	162.1	0.2863	300
310	0.5400	165.3	0.2941	0.5021	165.1	0.2926	0.4688	164.9	0.2911	0.4395	164.7	0.2898	310
320	0.5485	168.0	0.2975	0.5100	167.8	0.2960	0.4764	167.6	0.2946	0.4467	167.3	0.2932	320
330	0.5569	170.6	0.3009	0.5180	170.4	0.2994	0.4839	170.2	0.2979	0.4538	170.0	0.2966	330
340	0.5653	173.3	0.3042	0.5258	173.1	0.3027	0.4913	172.9	0.3013	0.4609	172.7	0.3000	340
350	0.5736	175.9	0.3075	0.5337	175.8	0.3061	0.4988	175.6	0.3046	0.4679	175.4	0.3033	350
360	0.5819	178.6	0.3109	0.5415	178.5	0.3094	0.5061	178.3	0.3080	0.4749	178.1	0.3066	360
370	0.5901	181.3	0.3141	0.5492	181.2	0.3127	0.5135	181.0	0.3113	0.4819	180.8	0.3099	370
380	0.5983	184.1	0.3174	0.5570	183.9	0.3159	0.5207	183.7	0.3145	0.4888	183.6	0.3132	380
390	0.6065	186.8	0.3206	0.5647	186.6	0.3192	0.5280	186.5	0.3178	0.4957	186.3	0.3165	390

ABSOLUTE PRESSURE, psia

TEMP. °F	180			190			200			220			TEMP. °F
	110.42			114.20			117.83			124.70			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.2506	112.4	0.2100	0.2361	112.7	0.2099	0.2230	113.0	0.2097	0.2003	113.6	0.2093	
120	0.2612	115.1	0.2147	0.2425	114.4	0.2128	0.2254	113.7	0.2108	–	–	–	120
130	0.2715	117.8	0.2194	0.2528	117.2	0.2176	0.2357	116.6	0.2157	0.2057	115.2	0.2120	130
140	0.2813	120.5	0.2239	0.2624	119.9	0.2221	0.2453	119.4	0.2204	0.2154	118.2	0.2170	140
150	0.2907	123.1	0.2282	0.2716	122.6	0.2266	0.2544	122.1	0.2249	0.2243	121.0	0.2217	150
160	0.2996	125.7	0.2325	0.2804	125.2	0.2309	0.2630	124.8	0.2293	0.2327	123.8	0.2262	160
170	0.3083	128.3	0.2366	0.2888	127.9	0.2350	0.2713	127.4	0.2335	0.2407	126.5	0.2306	170
180	0.3167	130.9	0.2406	0.2970	130.5	0.2391	0.2793	130.0	0.2376	0.2484	129.2	0.2348	180
190	0.3250	133.4	0.2446	0.3050	133.0	0.2431	0.2870	132.7	0.2417	0.2558	131.9	0.2389	190
200	0.3330	136.0	0.2485	0.3128	135.6	0.2471	0.2945	135.3	0.2457	0.2630	134.5	0.2430	200
210	0.3408	138.5	0.2524	0.3204	138.2	0.2509	0.3019	137.8	0.2496	0.2699	137.2	0.2470	210
220	0.3486	141.1	0.2562	0.3278	140.8	0.2548	0.3091	140.4	0.2534	0.2767	139.8	0.2509	220
230	0.3561	143.6	0.2599	0.3351	143.3	0.2585	0.3162	143.0	0.2572	0.2834	142.4	0.2547	230
240	0.3636	146.2	0.2636	0.3423	145.9	0.2623	0.3231	145.6	0.2610	0.2899	145.0	0.2585	240
250	0.3710	148.8	0.2673	0.3494	148.5	0.2659	0.3299	148.2	0.2647	0.2963	147.7	0.2622	250
260	0.3782	151.4	0.2709	0.3564	151.1	0.2696	0.3367	150.9	0.2683	0.3026	150.3	0.2659	260
270	0.3854	154.0	0.2745	0.3633	153.7	0.2732	0.3433	153.5	0.2719	0.3088	153.0	0.2696	270
280	0.3925	156.6	0.2780	0.3701	156.3	0.2767	0.3499	156.1	0.2755	0.3149	155.6	0.2732	280
290	0.3996	159.2	0.2815	0.3768	159.0	0.2803	0.3563	158.7	0.2790	0.3209	158.3	0.2767	290
300	0.4065	161.8	0.2850	0.3835	161.6	0.2838	0.3627	161.4	0.2826	0.3269	160.9	0.2803	300
310	0.4134	164.5	0.2885	0.3901	164.3	0.2872	0.3691	164.1	0.2860	0.3328	163.6	0.2838	310
320	0.4203	167.1	0.2919	0.3966	166.9	0.2907	0.3754	166.7	0.2895	0.3386	166.3	0.2873	320
330	0.4271	169.8	0.2953	0.4031	169.6	0.2941	0.3816	169.4	0.2929	0.3444	169.0	0.2907	330
340	0.4338	172.5	0.2987	0.4096	172.3	0.2975	0.3878	172.1	0.2963	0.3501	171.7	0.2941	340
350	0.4405	175.2	0.3020	0.4160	175.0	0.3008	0.3939	174.8	0.2997	0.3558	174.5	0.2975	350
360	0.4472	177.9	0.3054	0.4224	177.7	0.3042	0.4000	177.6	0.3030	0.3614	177.2	0.3009	360
370	0.4538	180.6	0.3087	0.4287	180.5	0.3075	0.4061	180.3	0.3064	0.3670	179.9	0.3042	370
380	0.4604	183.4	0.3120	0.4350	183.2	0.3108	0.4121	183.1	0.3097	0.3726	182.7	0.3075	380
390	0.4669	186.2	0.3153	0.4412	186.0	0.3141	0.4181	185.8	0.3129	0.3781	185.5	0.3108	390
400	0.4735	188.9	0.3185	0.4474	188.8	0.3173	0.4240	188.6	0.3162	0.3836	188.3	0.3141	400
410	0.4799	191.7	0.3217	0.4536	191.6	0.3206	0.4299	191.4	0.3194	0.3890	191.1	0.3173	410

Table 2 *(continued)*
DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	240			260			280			300			TEMP. °F
	131.12			137.14			142.81			148.19			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.1811	114.0	0.2088	0.1647	114.4	0.2084	0.1505	114.7	0.2079	0.1381	114.9	0.2074	
140	0.1899	116.8	0.2135	0.1676	115.4	0.2100	–	–	–	–	–	–	140
150	0.1989	119.8	0.2185	0.1769	118.6	0.2153	0.1574	117.2	0.2120	0.1399	115.6	0.2085	150
160	0.2072	122.7	0.2232	0.1853	121.6	0.2202	0.1661	120.4	0.2172	0.1490	119.1	0.2141	160
170	0.2150	125.5	0.2277	0.1931	124.5	0.2249	0.1739	123.5	0.2221	0.1571	122.3	0.2193	170
180	0.2225	128.3	0.2321	0.2004	127.4	0.2294	0.1812	126.4	0.2268	0.1644	125.4	0.2241	180
190	0.2297	131.0	0.2363	0.2074	130.2	0.2337	0.1881	129.3	0.2312	0.1713	128.4	0.2288	190
200	0.2365	133.7	0.2404	0.2141	133.0	0.2380	0.1947	132.1	0.2356	0.1777	131.3	0.2332	200
210	0.2432	136.4	0.2445	0.2205	135.7	0.2421	0.2009	134.9	0.2398	0.1839	134.1	0.2375	210
220	0.2497	139.1	0.2484	0.2267	138.4	0.2461	0.2070	137.7	0.2439	0.1897	137.0	0.2417	220
230	0.2560	141.8	0.2523	0.2328	141.1	0.2501	0.2128	140.4	0.2479	0.1954	139.8	0.2458	230
240	0.2622	144.4	0.2562	0.2387	143.8	0.2540	0.2185	143.2	0.2518	0.2009	142.5	0.2498	240
250	0.2682	147.1	0.2599	0.2444	146.5	0.2578	0.2240	145.9	0.2557	0.2062	145.3	0.2537	250
260	0.2742	149.8	0.2637	0.2501	149.2	0.2616	0.2294	148.6	0.2595	0.2114	148.1	0.2576	260
270	0.2800	152.4	0.2674	0.2556	151.9	0.2653	0.2347	151.4	0.2633	0.2165	150.8	0.2614	270
280	0.2858	155.1	0.2710	0.2611	154.6	0.2689	0.2399	154.1	0.2670	0.2215	153.6	0.2651	280
290	0.2914	157.8	0.2746	0.2664	157.3	0.2726	0.2450	156.8	0.2707	0.2264	156.3	0.2688	290
300	0.2970	160.5	0.2782	0.2717	160.0	0.2762	0.2500	159.5	0.2743	0.2312	159.1	0.2725	300
310	0.3025	163.2	0.2817	0.2769	162.7	0.2797	0.2549	162.3	0.2778	0.2359	161.8	0.2761	310
320	0.3080	165.9	0.2852	0.2820	165.5	0.2832	0.2598	165.0	0.2814	0.2405	164.6	0.2796	320
330	0.3134	168.6	0.2886	0.2871	168.2	0.2867	0.2646	167.8	0.2849	0.2451	167.4	0.2832	330
340	0.3187	171.3	0.2921	0.2922	170.9	0.2902	0.2694	170.5	0.2884	0.2496	170.1	0.2867	340
350	0.3240	174.1	0.2955	0.2971	173.7	0.2936	0.2741	173.3	0.2918	0.2541	172.9	0.2901	350
360	0.3293	176.8	0.2989	0.3021	176.5	0.2970	0.2787	176.1	0.2952	0.2585	175.7	0.2936	360
370	0.3345	179.6	0.3022	0.3069	179.2	0.3004	0.2833	178.9	0.2986	0.2629	178.5	0.2970	370
380	0.3397	182.4	0.3056	0.3118	182.0	0.3037	0.2879	181.7	0.3020	0.2672	181.3	0.3003	380
390	0.3448	185.2	0.3089	0.3166	184.8	0.3070	0.2924	184.5	0.3053	0.2715	184.2	0.3037	390
400	0.3499	188.0	0.3121	0.3214	187.6	0.3103	0.2969	187.3	0.3086	0.2757	187.0	0.3070	400
410	0.3549	190.8	0.3154	0.3261	190.5	0.3136	0.3014	190.2	0.3119	0.2800	189.9	0.3103	410
420	0.3600	193.6	0.3186	0.3308	193.3	0.3168	0.3058	193.0	0.3152	0.2841	192.7	0.3136	420
430	0.3650	196.5	0.3219	0.3355	196.2	0.3201	0.3102	195.9	0.3184	0.2883	195.6	0.3168	430

ABSOLUTE PRESSURE, psia

TEMP. °F	320			340			360			380			TEMP. °F
	153.29			158.15			162.79			167.23			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.1271	115.1	0.2068	0.1173	115.1	0.2061	0.1084	115.1	0.2054	0.1003	115.0	0.2047	
160	0.1335	117.6	0.2109	0.1192	115.9	0.2074	–	–	–	–	–	–	160
170	0.1420	121.0	0.2164	0.1282	119.6	0.2134	0.1154	118.1	0.2102	0.1033	116.3	0.2067	170
180	0.1495	124.3	0.2215	0.1360	123.1	0.2188	0.1237	121.8	0.2161	0.1123	120.4	0.2132	180
190	0.1563	127.4	0.2263	0.1430	126.3	0.2239	0.1309	125.2	0.2214	0.1198	124.0	0.2188	190
200	0.1628	130.4	0.2309	0.1494	129.4	0.2286	0.1374	128.4	0.2263	0.1265	127.4	0.2240	200
210	0.1688	133.3	0.2353	0.1554	132.5	0.2331	0.1434	131.6	0.2310	0.1326	130.6	0.2288	210
220	0.1746	136.2	0.2396	0.1611	135.4	0.2375	0.1491	134.6	0.2355	0.1383	133.7	0.2334	220
230	0.1801	139.0	0.2438	0.1666	138.3	0.2418	0.1545	137.6	0.2398	0.1436	136.8	0.2379	230
240	0.1855	141.9	0.2478	0.1718	141.2	0.2459	0.1596	140.5	0.2440	0.1487	139.8	0.2422	240
250	0.1907	144.7	0.2518	0.1769	144.0	0.2500	0.1646	143.4	0.2481	0.1535	142.7	0.2464	250
260	0.1957	147.5	0.2557	0.1817	146.9	0.2539	0.1693	146.2	0.2522	0.1582	145.6	0.2504	260
270	0.2006	150.3	0.2596	0.1865	149.7	0.2578	0.1739	149.1	0.2561	0.1627	148.5	0.2544	270
280	0.2054	153.0	0.2633	0.1911	152.5	0.2616	0.1784	151.9	0.2599	0.1671	151.4	0.2583	280
290	0.2101	155.8	0.2671	0.1957	155.3	0.2654	0.1828	154.8	0.2638	0.1713	154.2	0.2622	290
300	0.2147	158.6	0.2707	0.2001	158.1	0.2691	0.1871	157.6	0.2675	0.1755	157.1	0.2659	300
310	0.2192	161.4	0.2744	0.2044	160.9	0.2728	0.1913	160.4	0.2712	0.1796	159.9	0.2697	310
320	0.2236	164.1	0.2780	0.2087	163.7	0.2764	0.1954	163.2	0.2748	0.1836	162.8	0.2733	320
330	0.2280	166.9	0.2815	0.2129	166.5	0.2799	0.1995	166.1	0.2784	0.1875	165.6	0.2770	330
340	0.2323	169.7	0.2850	0.2171	169.3	0.2835	0.2035	168.9	0.2820	0.1913	168.5	0.2806	340
350	0.2366	172.5	0.2885	0.2211	172.1	0.2870	0.2074	171.7	0.2855	0.1951	171.3	0.2841	350
360	0.2408	175.3	0.2920	0.2252	175.0	0.2905	0.2113	174.6	0.2890	0.1988	174.2	0.2876	360
370	0.2450	178.2	0.2954	0.2291	177.8	0.2939	0.2151	177.4	0.2924	0.2025	177.0	0.2911	370
380	0.2491	181.0	0.2988	0.2331	180.6	0.2973	0.2189	180.3	0.2959	0.2062	179.9	0.2945	380
390	0.2532	183.8	0.3021	0.2370	183.5	0.3007	0.2226	183.1	0.2993	0.2097	182.8	0.2979	390
400	0.2572	186.7	0.3055	0.2408	186.3	0.3040	0.2263	186.0	0.3026	0.2133	185.7	0.3013	400
410	0.2612	189.5	0.3088	0.2447	189.2	0.3073	0.2300	188.9	0.3060	0.2168	188.6	0.3046	410
420	0.2652	192.4	0.3121	0.2485	192.1	0.3106	0.2336	191.8	0.3093	0.2203	191.5	0.3080	420
430	0.2691	195.3	0.3153	0.2522	195.0	0.3139	0.2372	194.7	0.3126	0.2237	194.4	0.3113	430
440	0.2730	198.2	0.3186	0.2559	197.9	0.3172	0.2408	197.6	0.3158	0.2272	197.3	0.3145	440
450	0.2769	201.1	0.3218	0.2597	200.8	0.3204	0.2443	200.5	0.3191	0.2305	200.3	0.3178	450

Table 2 *(continued)*

DuPont™ ISCEON® MO49*Plus*™ Superheated Vapor—Constant Pressure Tables

V = Volume in ft³/lb H = Enthalpy in BTU/lb S = Entropy in BTU/lb·R (Saturated Vapor Properties in parentheses)

ABSOLUTE PRESSURE, psia

TEMP. °F	400			420			440			460			TEMP. °F
	171.49			175.57			179.50			183.27			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0930	114.8	0.2038	0.0861	114.6	0.2029	0.0798	114.2	0.2018	0.0738	113.7	0.2006	
180	0.1015	118.8	0.2100	0.0911	116.9	0.2065	0.0804	114.5	0.2023	–	–	–	180
190	0.1096	122.7	0.2161	0.1000	121.3	0.2133	0.0908	119.6	0.2102	0.0817	117.7	0.2068	190
200	0.1165	126.3	0.2216	0.1072	125.1	0.2191	0.0986	123.8	0.2166	0.0903	122.3	0.2139	200
210	0.1227	129.6	0.2266	0.1136	128.6	0.2244	0.1052	127.5	0.2222	0.0973	126.3	0.2198	210
220	0.1284	132.8	0.2314	0.1194	131.9	0.2294	0.1110	130.9	0.2273	0.1033	129.9	0.2252	220
230	0.1337	136.0	0.2360	0.1247	135.1	0.2341	0.1164	134.3	0.2321	0.1088	133.3	0.2302	230
240	0.1387	139.0	0.2404	0.1297	138.3	0.2385	0.1214	137.5	0.2368	0.1138	136.6	0.2350	240
250	0.1435	142.0	0.2446	0.1344	141.3	0.2429	0.1261	140.6	0.2412	0.1185	139.8	0.2395	250
260	0.1481	145.0	0.2487	0.1390	144.3	0.2471	0.1306	143.6	0.2455	0.1230	142.9	0.2438	260
270	0.1525	147.9	0.2528	0.1433	147.3	0.2512	0.1349	146.7	0.2496	0.1272	146.0	0.2481	270
280	0.1568	150.8	0.2567	0.1475	150.2	0.2552	0.1391	149.6	0.2537	0.1313	149.0	0.2522	280
290	0.1610	153.7	0.2606	0.1516	153.2	0.2591	0.1431	152.6	0.2577	0.1352	152.0	0.2562	290
300	0.1650	156.6	0.2644	0.1556	156.1	0.2630	0.1469	155.5	0.2616	0.1390	155.0	0.2602	300
310	0.1690	159.5	0.2682	0.1594	159.0	0.2668	0.1507	158.5	0.2654	0.1427	158.0	0.2640	310
320	0.1729	162.3	0.2719	0.1632	161.8	0.2705	0.1544	161.4	0.2691	0.1463	160.9	0.2678	320
330	0.1767	165.2	0.2756	0.1669	164.7	0.2742	0.1580	164.3	0.2728	0.1498	163.8	0.2715	330
340	0.1804	168.1	0.2792	0.1705	167.6	0.2778	0.1615	167.2	0.2765	0.1533	166.8	0.2752	340
350	0.1840	170.9	0.2827	0.1740	170.5	0.2814	0.1649	170.1	0.2801	0.1566	169.7	0.2789	350
360	0.1877	173.8	0.2863	0.1775	173.4	0.2849	0.1683	173.0	0.2837	0.1599	172.6	0.2825	360
370	0.1912	176.7	0.2897	0.1810	176.3	0.2885	0.1717	175.9	0.2872	0.1632	175.5	0.2860	370
380	0.1947	179.6	0.2932	0.1844	179.2	0.2919	0.1749	178.8	0.2907	0.1663	178.5	0.2895	380
390	0.1982	182.4	0.2966	0.1877	182.1	0.2954	0.1782	181.7	0.2942	0.1695	181.4	0.2930	390
400	0.2016	185.3	0.3000	0.1910	185.0	0.2988	0.1814	184.7	0.2976	0.1726	184.3	0.2964	400
410	0.2050	188.2	0.3034	0.1943	187.9	0.3021	0.1845	187.6	0.3010	0.1757	187.3	0.2998	410
420	0.2083	191.2	0.3067	0.1975	190.8	0.3055	0.1877	190.5	0.3043	0.1787	190.2	0.3032	420
430	0.2116	194.1	0.3100	0.2007	193.8	0.3088	0.1907	193.5	0.3077	0.1817	193.2	0.3065	430
440	0.2149	197.0	0.3133	0.2039	196.7	0.3121	0.1938	196.4	0.3110	0.1846	196.1	0.3099	440
450	0.2182	200.0	0.3166	0.2070	199.7	0.3154	0.1968	199.4	0.3142	0.1875	199.1	0.3131	450
460	0.2214	202.9	0.3198	0.2101	202.7	0.3186	0.1998	202.4	0.3175	0.1905	202.1	0.3164	460
470	0.2246	205.9	0.3230	0.2132	205.6	0.3219	0.2028	205.4	0.3207	0.1933	205.1	0.3197	470

ABSOLUTE PRESSURE, psia

TEMP. °F	480			500			525						TEMP. °F
	186.90			190.40			194.57						
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0681	113.1	0.1992	0.0625	112.2	0.1976	0.0557	110.8	0.1950				
190	0.0724	115.3	0.2027	–	–	–	–	–	–				190
200	0.0824	120.7	0.2109	0.0747	118.8	0.2076	0.0646	115.9	0.2027				200
210	0.0899	125.0	0.2174	0.0828	123.6	0.2148	0.0744	121.6	0.2113				210
220	0.0962	128.8	0.2231	0.0894	127.7	0.2209	0.0815	126.1	0.2180				220
230	0.1017	132.4	0.2283	0.0951	131.4	0.2263	0.0875	130.1	0.2238				230
240	0.1068	135.8	0.2332	0.1003	134.9	0.2313	0.0927	133.7	0.2290				240
250	0.1115	139.1	0.2378	0.1050	138.3	0.2361	0.0975	137.2	0.2340				250
260	0.1159	142.2	0.2422	0.1094	141.5	0.2406	0.1019	140.6	0.2387				260
270	0.1202	145.4	0.2465	0.1136	144.7	0.2450	0.1061	143.8	0.2431				270
280	0.1242	148.4	0.2507	0.1176	147.8	0.2493	0.1101	147.0	0.2475				280
290	0.1280	151.5	0.2548	0.1214	150.9	0.2534	0.1138	150.1	0.2517				290
300	0.1318	154.5	0.2588	0.1251	153.9	0.2574	0.1175	153.2	0.2558				300
310	0.1354	157.4	0.2627	0.1287	156.9	0.2614	0.1210	156.3	0.2598				310
320	0.1389	160.4	0.2665	0.1321	159.9	0.2652	0.1243	159.3	0.2637				320
330	0.1424	163.4	0.2703	0.1355	162.9	0.2690	0.1276	162.3	0.2675				330
340	0.1457	166.3	0.2740	0.1388	165.9	0.2728	0.1308	165.3	0.2713				340
350	0.1490	169.3	0.2776	0.1420	168.8	0.2765	0.1339	168.3	0.2750				350
360	0.1522	172.2	0.2813	0.1451	171.8	0.2801	0.1370	171.3	0.2787				360
370	0.1554	175.1	0.2848	0.1482	174.8	0.2837	0.1400	174.3	0.2823				370
380	0.1585	178.1	0.2884	0.1512	177.7	0.2872	0.1429	177.2	0.2859				380
390	0.1615	181.0	0.2918	0.1542	180.7	0.2907	0.1458	180.2	0.2894				390
400	0.1645	184.0	0.2953	0.1571	183.6	0.2942	0.1487	183.2	0.2929				400
410	0.1675	186.9	0.2987	0.1600	186.6	0.2976	0.1515	186.2	0.2963				410
420	0.1704	189.9	0.3021	0.1629	189.6	0.3010	0.1542	189.2	0.2997				420
430	0.1733	192.9	0.3055	0.1657	192.6	0.3044	0.1569	192.2	0.3031				430
440	0.1762	195.8	0.3088	0.1685	195.5	0.3077	0.1596	195.2	0.3065				440
450	0.1790	198.8	0.3121	0.1712	198.5	0.3111	0.1623	198.2	0.3098				450
460	0.1819	201.8	0.3154	0.1740	201.6	0.3143	0.1649	201.2	0.3131				460
470	0.1846	204.8	0.3186	0.1767	204.6	0.3176	0.1675	204.2	0.3164				470
480	0.1874	207.9	0.3218	0.1793	207.6	0.3208	0.1701	207.3	0.3196				480

For Further Information: (800) 235-7882

www.refrigerants.dupont.com

DuPont Fluorochemicals
Wilmington, DE 19880-0711

Europe, Middle East, and Africa

DuPont de Nemours
International S.A.
2 Chemin du Pavillon
P.O. Box 50
CH-1218 Le Grand-Saconnex
Geneva, Switzerland
41-22-717-5111

Canada

DuPont Canada, Inc.
P.O. Box 2200, Streetsville
Mississauga, Ontario
Canada
L5M 2H3
(905) 821-3300

DuPont México, S.A. de C.V.

Homero 206
Col. Chapultepec Morales
C.P. 11570 México, D.F.
52-55-57 22 11 00

South America

DuPont do Brasil S.A.
Alameda Itapecuru, 506
Alphaville 06454-080 Barueri
São Paulo, Brazil
55-11-4166-8263

DuPont Argentina S.A.

Casilla Correo 1888
Correo Central
1000 Buenos Aires, Argentina
0 800 33 38766

Asia Pacific

Philippines
DuPont Fareast Inc Philippines
19th floor Gt Tower International
6815 Ayala Avcorner Hv Costast
Makati City
Philippines
1227
63-2-8189911
63-2-8189659

Thailand
DuPont (Thailand) Co.,Ltd
6-7th Floor, M. Thai Tower, All Seasons Place,
87 Wireless Road, Lumpini, Phatumwan
Bangkok
Thailand
10330
66-2-6594000
66-2-6594001-2

Malaysia
DuPont Malaysia Sdn Bhd
6th Floor, Bangunan Samudera,
No.1 Jalan Kontraktor U1/14
Sek U1, Hicom-Glenmarie Industrial Park
Shah Alam
Selangor
40150
60-3-55693006
60-3-55693001

Singapore
DuPont Company (Singapore) Pte Ltd
1 HarbourFront Place #11-01
HarbourFront Tower One
Singapore
098633
65-65863688
65-62727494

Indonesia
PT DuPont Indonesia
Menara Mulia 5th Floor
Jl Jend. Gatot Subroto Kav. 9-11
Jakarta
Indonesia
12930
62-21-5222555
62-21-5222565

Taiwan
DuPont Taiwan Ltd.
13Fl., No. 167, Tun Hwa N. Rd.,
Taipei
Taiwan, R. O. C.
105
886-2-27191999
886-2-25457098

India
E I DuPont India Private Ltd
DLF Cyber Greens, Tower "C" 7th Floor
Sector 25A, DLF City
Phase III
Gurgaon 122002
INDIA
91-124-2540900
91-124-2540891

Korea
DuPont(Korea) Inc.
4th Floor, Asia Tower
#726, Yeoksam-dong, Kangnam-Ku
Seoul, Korea
135-719
82-2-22225207
82-2-22225483

Hong Kong
DuPont China Limited
26/F., Tower 6, Gateway
Canton Road
Tsimsha tsui
HongKong
852-27345345
852-23683516

Australia/New Zealand
DuPont (Australia) Ltd
168 Walker street North Sydney
PO Box 930 North Sydney
Sydney
NSW
2060
61-2-99236111
61-2-99236135

China
DuPont China Holding Co.,Ltd.
15th Floor, Shui On Plaza,
333 Huai Hai Road (Central)
Shanghai
200021
86-21-63866366
86-21-63853542

(4/08) RWJ352 Printed in U.S.A.
Reorder No.: K-18297

The miracles of science™