DuPont™ ISCEON®

REFRIGERANTS

Technical Information

Thermodynamic Properties of DuPont™ ISCEON® MO99™

SI Units

The miracles of science™

Thermodynamic Properties of DuPont™ ISCEON® MO99™

SI Units

Physical Properties

Refrigerant Classification	HFC
Molecular Weight	99.1 g/mol
Boiling Point at One Atmosphere	-42.33 °C
Critical Temperature	85.27 °C
Critical Pressure	4304.54 kPa
Critical Density	510.45 kg/m^3
Critical Volume	0.0020 m^3/kg
Ozone Depletion Potential	0
Global Warming Potential (AR4)	2264
ASHRAE Standard 34 Safety Rating	A1
Temperature Glide (Low-Medium Temp)	3-4 °C

Units and Factors

t = temperature in °C
P = pressure in kiloPascals absolute [kPa (abs)]
v_f = volume of saturated liquid in m^3/kg
v_g = volume of saturated vapor in m^3/kg
V = volume of superheated vapor in m^3/kg
$d_f = 1/v_f$ = density of saturated liquid in kg/m^3
$d_g = 1/v_g$ = density of saturated vapor in kg/m^3
h_f = enthalpy of saturated liquid in kJ/kg
h_{fg} = enthalpy of vaporization in kJ/kg
h_g = enthalpy of saturated vapor in kJ/kg
H = enthalpy of superheated vapor in kJ/kg
s_f = entropy of saturated liquid in kJ/(kg) (K)
s_g = entropy of saturated vapor in kJ/(kg) (K)
S = entropy of superheated vapor in kJ/(kg) (K)

One atmosphere = 101.325 kPa
Reference point for enthalpy and entropy:
h_f = 200 kJ/kg at 0°C
s_f = 1 kJ/kg·K at 0°C

DuPont™ ISCEON® MO99™

Saturation Properties - Temperature Table

Temp °C	Pressure [kPa]		Volume [m^3/kg]		Density [kg/m^3]		Enthalpy [kJ/kg]			Entropy [kJ/K-kg]		Temp °C
	Liquid p_f	Vapor p_g	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	
-100	2.169	1.055	0.000639	13.7532	1564.2	0.073	73.5	247.8	321.3	0.427	1.890	-100
-99	2.379	1.170	0.000641	12.4636	1561.2	0.080	74.7	247.1	321.9	0.434	1.885	-99
-98	2.606	1.297	0.000642	11.3110	1558.2	0.088	76.0	246.5	322.4	0.441	1.879	-98
-97	2.852	1.435	0.000643	10.2793	1555.2	0.097	77.2	245.9	323.0	0.448	1.874	-97
-96	3.116	1.585	0.000644	9.3545	1552.2	0.107	78.4	245.2	323.6	0.455	1.869	-96
-95	3.402	1.749	0.000646	8.5243	1549.2	0.117	79.7	244.6	324.2	0.462	1.864	-95
-94	3.710	1.928	0.000647	7.7780	1546.2	0.129	80.9	243.9	324.8	0.469	1.860	-94
-93	4.040	2.121	0.000648	7.1062	1543.2	0.141	82.1	243.3	325.4	0.476	1.855	-93
-92	4.396	2.331	0.000649	6.5006	1540.2	0.154	83.3	242.7	326.0	0.483	1.850	-92
-91	4.777	2.559	0.000651	5.9541	1537.3	0.168	84.6	242.1	326.6	0.490	1.846	-91
-90	5.186	2.805	0.000652	5.4601	1534.3	0.183	85.8	241.4	327.2	0.496	1.842	-90
-89	5.624	3.071	0.000653	5.0130	1531.3	0.199	87.0	240.8	327.8	0.503	1.837	-89
-88	6.093	3.358	0.000654	4.6080	1528.4	0.217	88.3	240.2	328.5	0.510	1.833	-88
-87	6.595	3.668	0.000656	4.2405	1525.4	0.236	89.5	239.6	329.1	0.516	1.829	-87
-86	7.130	4.002	0.000657	3.9067	1522.4	0.256	90.7	239.0	329.7	0.523	1.825	-86
-85	7.702	4.361	0.000658	3.6032	1519.5	0.278	91.9	238.3	330.3	0.529	1.821	-85
-84	8.311	4.747	0.000659	3.3268	1516.5	0.301	93.2	237.7	330.9	0.536	1.817	-84
-83	8.960	5.162	0.000661	3.0749	1513.5	0.325	94.4	237.1	331.5	0.542	1.813	-83
-82	9.651	5.606	0.000662	2.8451	1510.6	0.351	95.6	236.5	332.1	0.549	1.810	-82
-81	10.386	6.083	0.000663	2.6351	1507.6	0.379	96.8	235.9	332.7	0.555	1.806	-81
-80	11.167	6.593	0.000665	2.4430	1504.7	0.409	98.1	235.3	333.3	0.561	1.803	-80
-79	11.996	7.138	0.000666	2.2672	1501.7	0.441	99.3	234.7	334.0	0.568	1.799	-79
-78	12.876	7.721	0.000667	2.1061	1498.8	0.475	100.5	234.1	334.6	0.574	1.796	-78
-77	13.808	8.343	0.000669	1.9582	1495.8	0.511	101.7	233.5	335.2	0.580	1.793	-77
-76	14.796	9.006	0.000670	1.8225	1492.8	0.549	103.0	232.8	335.8	0.586	1.789	-76
-75	15.841	9.713	0.000671	1.6977	1489.9	0.589	104.2	232.2	336.4	0.593	1.786	-75
-74	16.947	10.466	0.000673	1.5828	1486.9	0.632	105.4	231.6	337.0	0.599	1.783	-74
-73	18.115	11.267	0.000674	1.4771	1484.0	0.677	106.6	231.0	337.7	0.605	1.780	-73
-72	19.349	12.118	0.000675	1.3795	1481.0	0.725	107.9	230.4	338.3	0.611	1.777	-72
-71	20.651	13.021	0.000677	1.2895	1478.0	0.775	109.1	229.8	338.9	0.617	1.774	-71
-70	22.024	13.980	0.000678	1.2064	1475.1	0.829	110.3	229.2	339.5	0.623	1.771	-70
-69	23.471	14.997	0.000679	1.1296	1472.1	0.885	111.5	228.6	340.1	0.629	1.768	-69
-68	24.995	16.073	0.000681	1.0585	1469.1	0.945	112.8	228.0	340.8	0.635	1.766	-68
-67	26.599	17.213	0.000682	0.9926	1466.1	1.007	114.0	227.4	341.4	0.641	1.763	-67
-66	28.285	18.419	0.000683	0.9316	1463.1	1.073	115.2	226.8	342.0	0.647	1.760	-66
-65	30.058	19.693	0.000685	0.8750	1460.2	1.143	116.5	226.1	342.6	0.653	1.758	-65
-64	31.921	21.039	0.000686	0.8224	1457.2	1.216	117.7	225.5	343.2	0.659	1.755	-64
-63	33.876	22.459	0.000688	0.7736	1454.2	1.293	118.9	224.9	343.9	0.665	1.753	-63
-62	35.927	23.957	0.000689	0.7282	1451.2	1.373	120.2	224.3	344.5	0.671	1.751	-62
-61	38.078	25.536	0.000691	0.6859	1448.2	1.458	121.4	223.7	345.1	0.677	1.748	-61
-60	40.332	27.199	0.000692	0.6465	1445.2	1.547	122.6	223.1	345.7	0.682	1.746	-60
-59	42.692	28.949	0.000693	0.6098	1442.1	1.640	123.9	222.5	346.3	0.688	1.744	-59
-58	45.163	30.790	0.000695	0.5756	1439.1	1.737	125.1	221.8	347.0	0.694	1.742	-58
-57	47.747	32.725	0.000696	0.5436	1436.1	1.839	126.4	221.2	347.6	0.700	1.739	-57
-56	50.450	34.758	0.000698	0.5138	1433.1	1.946	127.6	220.6	348.2	0.705	1.737	-56
-55	53.274	36.892	0.000699	0.4859	1430.0	2.058	128.8	220.0	348.8	0.711	1.735	-55
-54	56.223	39.131	0.000701	0.4598	1427.0	2.175	130.1	219.4	349.4	0.717	1.733	-54
-53	59.302	41.478	0.000702	0.4353	1424.0	2.297	131.3	218.7	350.1	0.722	1.731	-53
-52	62.515	43.939	0.000704	0.4124	1420.9	2.425	132.6	218.1	350.7	0.728	1.729	-52
-51	65.865	46.515	0.000705	0.3910	1417.8	2.558	133.8	217.5	351.3	0.734	1.727	-51
-50	69.357	49.212	0.000707	0.3708	1414.8	2.697	135.1	216.9	351.9	0.739	1.726	-50
-49	72.994	52.034	0.000708	0.3519	1411.7	2.841	136.3	216.2	352.5	0.745	1.724	-49
-48	76.783	54.984	0.000710	0.3342	1408.6	2.992	137.6	215.6	353.1	0.750	1.722	-48
-47	80.726	58.067	0.000711	0.3175	1405.5	3.150	138.8	214.9	353.8	0.756	1.720	-47
-46	84.828	61.287	0.000713	0.3018	1402.5	3.313	140.1	214.3	354.4	0.761	1.719	-46
-45	89.093	64.648	0.000715	0.2871	1399.4	3.484	141.3	213.7	355.0	0.767	1.717	-45
-44	93.527	68.155	0.000716	0.2732	1396.2	3.661	142.6	213.0	355.6	0.772	1.715	-44
-43	98.133	71.813	0.000718	0.2601	1393.1	3.845	143.8	212.4	356.2	0.778	1.714	-43
-42	102.917	75.625	0.000719	0.2477	1390.0	4.037	145.1	211.7	356.8	0.783	1.712	-42
-41	107.883	79.596	0.000721	0.2361	1386.9	4.236	146.4	211.1	357.4	0.789	1.711	-41
-40	113.036	83.732	0.000723	0.2251	1383.7	4.442	147.6	210.4	358.1	0.794	1.709	-40
-39	118.380	88.037	0.000724	0.2147	1380.6	4.657	148.9	209.8	358.7	0.800	1.708	-39
-38	123.922	92.515	0.000726	0.2049	1377.4	4.880	150.2	209.1	359.3	0.805	1.707	-38

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Saturation Properties - Temperature Table

Temp °C	Pressure [kPa]		Volume [m^3/kg]		Density [kg/m^3]		Enthalpy [kJ/kg]			Entropy [kJ/K-kg]		Temp °C
	Liquid p_f	Vapor p_g	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	
-37	129.664	97.172	0.000728	0.1957	1374.2	5.111	151.4	208.5	359.9	0.810	1.705	-37
-36	135.614	102.013	0.000729	0.1869	1371.1	5.350	152.7	207.8	360.5	0.816	1.704	-36
-35	141.774	107.042	0.000731	0.1786	1367.9	5.599	154.0	207.1	361.1	0.821	1.702	-35
-34	148.152	112.265	0.000733	0.1708	1364.7	5.856	155.2	206.5	361.7	0.826	1.701	-34
-33	154.751	117.686	0.000734	0.1633	1361.5	6.122	156.5	205.8	362.3	0.832	1.700	-33
-32	161.578	123.312	0.000736	0.1563	1358.3	6.398	157.8	205.1	362.9	0.837	1.699	-32
-31	168.636	129.147	0.000738	0.1496	1355.0	6.684	159.1	204.4	363.5	0.842	1.697	-31
-30	175.933	135.197	0.000740	0.1433	1351.8	6.980	160.4	203.7	364.1	0.847	1.696	-30
-29	183.472	141.467	0.000742	0.1373	1348.5	7.286	161.7	203.0	364.7	0.853	1.695	-29
-28	191.260	147.962	0.000743	0.1315	1345.3	7.602	162.9	202.4	365.3	0.858	1.694	-28
-27	199.302	154.689	0.000745	0.1261	1342.0	7.929	164.2	201.7	365.9	0.863	1.693	-27
-26	207.603	161.652	0.000747	0.1210	1338.7	8.268	165.5	201.0	366.5	0.868	1.692	-26
-25	216.169	168.858	0.000749	0.1161	1335.4	8.617	166.8	200.3	367.1	0.874	1.691	-25
-24	225.005	176.312	0.000751	0.1114	1332.1	8.978	168.1	199.6	367.7	0.879	1.690	-24
-23	234.118	184.020	0.000753	0.1069	1328.8	9.351	169.4	198.8	368.3	0.884	1.689	-23
-22	243.512	191.987	0.000754	0.1027	1325.4	9.735	170.7	198.1	368.8	0.889	1.688	-22
-21	253.194	200.220	0.000756	0.0987	1322.1	10.133	172.0	197.4	369.4	0.894	1.687	-21
-20	263.169	208.725	0.000758	0.0949	1318.7	10.543	173.3	196.7	370.0	0.899	1.686	-20
-19	273.444	217.507	0.000760	0.0912	1315.3	10.965	174.6	196.0	370.6	0.905	1.685	-19
-18	284.024	226.573	0.000762	0.0877	1312.0	11.402	175.9	195.2	371.2	0.910	1.684	-18
-17	294.914	235.929	0.000764	0.0844	1308.6	11.851	177.2	194.5	371.7	0.915	1.683	-17
-16	306.122	245.581	0.000766	0.0812	1305.1	12.315	178.6	193.7	372.3	0.920	1.682	-16
-15	317.652	255.535	0.000768	0.0782	1301.7	12.793	179.9	193.0	372.9	0.925	1.681	-15
-14	329.511	265.797	0.000770	0.0753	1298.2	13.286	181.2	192.2	373.5	0.930	1.680	-14
-13	341.705	276.375	0.000772	0.0725	1294.8	13.793	182.5	191.5	374.0	0.935	1.680	-13
-12	354.240	287.273	0.000774	0.0699	1291.3	14.316	183.9	190.7	374.6	0.940	1.679	-12
-11	367.123	298.500	0.000777	0.0673	1287.8	14.854	185.2	190.0	375.1	0.945	1.678	-11
-10	380.358	310.060	0.000779	0.0649	1284.3	15.409	186.5	189.2	375.7	0.950	1.677	-10
-9	393.954	321.962	0.000781	0.0626	1280.7	15.980	187.8	188.4	376.3	0.955	1.676	-9
-8	407.915	334.211	0.000783	0.0604	1277.2	16.567	189.2	187.6	376.8	0.960	1.676	-8
-7	422.249	346.814	0.000785	0.0582	1273.6	17.172	190.5	186.8	377.4	0.965	1.675	-7
-6	436.960	359.777	0.000787	0.0562	1270.0	17.794	191.9	186.1	377.9	0.970	1.674	-6
-5	452.057	373.109	0.000790	0.0542	1266.4	18.434	193.2	185.3	378.5	0.975	1.674	-5
-4	467.545	386.815	0.000792	0.0524	1262.8	19.093	194.6	184.4	379.0	0.980	1.673	-4
-3	483.431	400.903	0.000794	0.0506	1259.2	19.770	195.9	183.6	379.6	0.985	1.672	-3
-2	499.721	415.379	0.000797	0.0489	1255.5	20.466	197.3	182.8	380.1	0.990	1.672	-2
-1	516.422	430.250	0.000799	0.0472	1251.8	21.183	198.6	182.0	380.6	0.995	1.671	-1
0	533.541	445.524	0.000801	0.0456	1248.1	21.919	200.0	181.2	381.2	1.000	1.670	0
1	551.083	461.207	0.000804	0.0441	1244.4	22.676	201.4	180.3	381.7	1.005	1.670	1
2	569.055	477.307	0.000806	0.0426	1240.6	23.454	202.7	179.5	382.2	1.010	1.669	2
3	587.465	493.832	0.000809	0.0412	1236.8	24.253	204.1	178.6	382.7	1.015	1.668	3
4	606.319	510.787	0.000811	0.0399	1233.0	25.075	205.5	177.8	383.3	1.020	1.668	4
5	625.623	528.182	0.000814	0.0386	1229.2	25.919	206.9	176.9	383.8	1.025	1.667	5
6	645.385	546.022	0.000816	0.0373	1225.4	26.787	208.3	176.0	384.3	1.030	1.667	6
7	665.612	564.317	0.000819	0.0361	1221.5	27.678	209.6	175.2	384.8	1.034	1.666	7
8	686.309	583.072	0.000821	0.0350	1217.6	28.594	211.0	174.3	385.3	1.039	1.665	8
9	707.484	602.296	0.000824	0.0339	1213.7	29.534	212.4	173.4	385.8	1.044	1.665	9
10	729.144	621.997	0.000827	0.0328	1209.7	30.501	213.8	172.5	386.3	1.049	1.664	10
11	751.297	642.182	0.000829	0.0318	1205.8	31.493	215.2	171.5	386.8	1.054	1.664	11
12	773.948	662.859	0.000832	0.0308	1201.8	32.512	216.6	170.6	387.3	1.059	1.663	12
13	797.105	684.036	0.000835	0.0298	1197.7	33.559	218.1	169.7	387.8	1.064	1.663	13
14	820.775	705.720	0.000838	0.0289	1193.7	34.634	219.5	168.8	388.2	1.069	1.662	14
15	844.965	727.921	0.000841	0.0280	1189.6	35.737	220.9	167.8	388.7	1.074	1.661	15
16	869.682	750.646	0.000844	0.0271	1185.5	36.871	222.3	166.9	389.2	1.078	1.661	16
17	894.934	773.903	0.000847	0.0263	1181.3	38.035	223.7	165.9	389.6	1.083	1.660	17
18	920.728	797.700	0.000850	0.0255	1177.1	39.230	225.2	164.9	390.1	1.088	1.660	18
19	947.070	822.046	0.000853	0.0247	1172.9	40.458	226.6	163.9	390.6	1.093	1.659	19
20	973.969	846.949	0.000856	0.0240	1168.6	41.718	228.1	162.9	391.0	1.098	1.659	20
21	1001.431	872.417	0.000859	0.0232	1164.3	43.012	229.5	161.9	391.4	1.103	1.658	21
22	1029.465	898.460	0.000862	0.0226	1160.0	44.341	231.0	160.9	391.9	1.108	1.658	22
23	1058.077	925.085	0.000865	0.0219	1155.6	45.706	232.4	159.9	392.3	1.112	1.657	23
24	1087.274	952.303	0.000869	0.0212	1151.2	47.108	233.9	158.8	392.7	1.117	1.657	24
25	1117.065	980.120	0.000872	0.0206	1146.8	48.548	235.4	157.8	393.2	1.122	1.656	25

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	Liquid p_f	Vapor p_g	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	
26	1147.458	1008.547	0.000875	0.0200	1142.3	50.026	236.8	156.7	393.6	1.127	1.656	26
27	1178.458	1037.592	0.000879	0.0194	1137.8	51.545	238.3	155.6	394.0	1.132	1.655	27
28	1210.075	1067.265	0.000882	0.0188	1133.2	53.105	239.8	154.6	394.4	1.137	1.654	28
29	1242.316	1097.575	0.000886	0.0183	1128.6	54.707	241.3	153.5	394.8	1.142	1.654	29
30	1275.189	1128.530	0.000890	0.0177	1123.9	56.354	242.8	152.3	395.2	1.146	1.653	30
31	1308.701	1160.141	0.000893	0.0172	1119.2	58.045	244.3	151.2	395.5	1.151	1.653	31
32	1342.861	1192.418	0.000897	0.0167	1114.5	59.783	245.8	150.1	395.9	1.156	1.652	32
33	1377.676	1225.369	0.000901	0.0162	1109.7	61.570	247.3	148.9	396.3	1.161	1.652	33
34	1413.154	1259.005	0.000905	0.0158	1104.8	63.406	248.9	147.7	396.6	1.166	1.651	34
35	1449.303	1293.336	0.000909	0.0153	1099.9	65.294	250.4	146.6	397.0	1.171	1.650	35
36	1486.131	1328.372	0.000913	0.0149	1094.9	67.234	251.9	145.4	397.3	1.176	1.650	36
37	1523.648	1364.123	0.000918	0.0144	1089.9	69.230	253.5	144.1	397.6	1.181	1.649	37
38	1561.859	1400.600	0.000922	0.0140	1084.8	71.283	255.0	142.9	397.9	1.185	1.648	38
39	1600.775	1437.813	0.000926	0.0136	1079.7	73.394	256.6	141.6	398.2	1.190	1.648	39
40	1640.403	1475.773	0.000931	0.0132	1074.5	75.567	258.2	140.4	398.5	1.195	1.647	40
41	1680.752	1514.491	0.000935	0.0129	1069.2	77.803	259.8	139.1	398.8	1.200	1.646	41
42	1721.830	1553.979	0.000940	0.0125	1063.9	80.105	261.3	137.8	399.1	1.205	1.646	42
43	1763.646	1594.247	0.000945	0.0121	1058.4	82.475	262.9	136.4	399.4	1.210	1.645	43
44	1806.209	1635.308	0.000950	0.0118	1052.9	84.917	264.5	135.1	399.6	1.215	1.644	44
45	1849.527	1677.173	0.000955	0.0114	1047.4	87.432	266.1	133.7	399.9	1.220	1.643	45
46	1893.609	1719.855	0.000960	0.0111	1041.7	90.024	267.8	132.3	400.1	1.225	1.643	46
47	1938.464	1763.365	0.000965	0.0108	1036.0	92.697	269.4	130.9	400.3	1.230	1.642	47
48	1984.101	1807.718	0.000971	0.0105	1030.2	95.454	271.0	129.5	400.5	1.235	1.641	48
49	2030.530	1852.925	0.000976	0.0102	1024.3	98.299	272.7	128.0	400.7	1.240	1.640	49
50	2077.759	1899.000	0.000982	0.0099	1018.3	101.236	274.4	126.5	400.9	1.245	1.639	50
51	2125.798	1945.957	0.000988	0.0096	1012.1	104.269	276.0	125.0	401.1	1.250	1.638	51
52	2174.657	1993.811	0.000994	0.0093	1005.9	107.402	277.7	123.5	401.2	1.255	1.637	52
53	2224.344	2042.575	0.001000	0.0090	999.6	110.643	279.4	121.9	401.3	1.260	1.636	53
54	2274.871	2092.265	0.001007	0.0088	993.1	113.994	281.1	120.3	401.4	1.265	1.635	54
55	2326.246	2142.897	0.001014	0.0085	986.6	117.464	282.9	118.6	401.5	1.270	1.634	55
56	2378.479	2194.487	0.001021	0.0083	979.9	121.058	284.6	117.0	401.6	1.275	1.633	56
57	2431.581	2247.052	0.001028	0.0080	973.0	124.784	286.4	115.3	401.6	1.280	1.632	57
58	2485.562	2300.609	0.001035	0.0078	966.0	128.649	288.2	113.5	401.7	1.286	1.631	58
59	2540.433	2355.177	0.001043	0.0075	958.9	132.663	289.9	111.7	401.7	1.291	1.630	59
60	2596.203	2410.774	0.001051	0.0073	951.6	136.835	291.8	109.9	401.7	1.296	1.628	60
61	2652.883	2467.422	0.001059	0.0071	944.1	141.175	293.6	108.0	401.6	1.301	1.627	61
62	2710.484	2525.141	0.001068	0.0069	936.4	145.696	295.4	106.1	401.5	1.307	1.625	62
63	2769.016	2583.953	0.001077	0.0066	928.5	150.412	297.3	104.1	401.4	1.312	1.624	63
64	2828.491	2643.884	0.001087	0.0064	920.3	155.337	299.2	102.1	401.3	1.318	1.622	64
65	2888.919	2704.957	0.001097	0.0062	911.9	160.489	301.1	100.0	401.1	1.323	1.621	65
66	2950.311	2767.201	0.001107	0.0060	903.3	165.886	303.1	97.8	400.9	1.329	1.619	66
67	3012.676	2830.645	0.001118	0.0058	894.3	171.553	305.1	95.6	400.6	1.334	1.617	67
68	3076.026	2895.319	0.001130	0.0056	885.1	177.514	307.1	93.3	400.3	1.340	1.615	68
69	3140.370	2961.261	0.001142	0.0054	875.4	183.800	309.1	90.9	400.0	1.346	1.613	69
70	3205.717	3028.507	0.001156	0.0053	865.3	190.446	311.2	88.4	399.6	1.352	1.611	70
71	3272.075	3097.100	0.001170	0.0051	854.8	197.497	313.3	85.8	399.1	1.358	1.608	71
72	3339.451	3167.088	0.001185	0.0049	843.8	205.002	315.5	83.0	398.6	1.364	1.606	72
73	3407.850	3238.526	0.001202	0.0047	832.1	213.025	317.8	80.2	398.0	1.370	1.603	73
74	3477.272	3311.476	0.001220	0.0045	819.8	221.646	320.1	77.2	397.3	1.377	1.600	74
75	3547.715	3386.014	0.001240	0.0043	806.6	230.964	322.5	74.0	396.5	1.383	1.597	75
76	3619.167	3462.230	0.001262	0.0041	792.5	241.110	325.0	70.5	395.5	1.390	1.593	76
77	3691.605	3540.236	0.001287	0.0040	777.2	252.262	327.6	66.8	394.4	1.397	1.589	77
78	3764.988	3620.177	0.001315	0.0038	760.3	264.665	330.4	62.8	393.2	1.405	1.585	78
79	3839.235	3702.251	0.001349	0.0036	741.4	278.686	333.3	58.3	391.7	1.413	1.580	79

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg H = Enthalpy in kJ/kg S = Entropy in kJ/kg.K Saturation Properties in Light Green

ABSOLUTE PRESSURE, kPa

Temp °C	10			20			30			40			Temp °C
	-74.61 °C			-64.77 °C			-58.42 °C			-53.62 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	1.6520	337.8	1.878	0.8624	343.9	1.851	0.5898	347.9	1.836	0.4504	350.9	1.826	
-70	1.6917	340.9	1.894	-	-	-	-	-	-	-	-	-	-70
-65	1.7347	344.3	1.910	-	-	-	-	-	-	-	-	-	-65
-60	1.7775	347.7	1.926	0.8833	347.2	1.867	-	-	-	-	-	-	-60
-55	1.8202	351.2	1.942	0.9050	350.7	1.883	0.5999	350.3	1.847	-	-	-	-55
-50	1.8629	354.7	1.958	0.9267	354.3	1.899	0.6146	353.9	1.863	0.4585	353.5	1.838	-50
-45	1.9054	358.2	1.974	0.9483	357.8	1.915	0.6292	357.5	1.879	0.4697	357.1	1.854	-45
-40	1.9479	361.8	1.989	0.9698	361.4	1.930	0.6438	361.1	1.895	0.4807	360.8	1.870	-40
-35	1.9904	365.4	2.005	0.9913	365.1	1.946	0.6583	364.8	1.911	0.4917	364.5	1.886	-35
-30	2.0328	369.1	2.020	1.0127	368.8	1.961	0.6727	368.5	1.926	0.5027	368.2	1.901	-30
-25	2.0751	372.8	2.035	1.0341	372.5	1.976	0.6871	372.2	1.941	0.5136	372.0	1.916	-25
-20	2.1175	376.5	2.050	1.0555	376.3	1.991	0.7015	376.0	1.956	0.5245	375.8	1.932	-20
-15	2.1598	380.3	2.065	1.0768	380.1	2.006	0.7158	379.8	1.971	0.5353	379.6	1.947	-15
-10	2.2020	384.2	2.080	1.0981	383.9	2.021	0.7301	383.7	1.986	0.5461	383.5	1.961	-10
-5	2.2443	388.0	2.094	1.1194	387.8	2.036	0.7444	387.6	2.001	0.5569	387.4	1.976	-5
0	2.2865	392.0	2.109	1.1406	391.8	2.050	0.7587	391.6	2.016	0.5677	391.4	1.991	0
5	2.3287	395.9	2.123	1.1619	395.8	2.065	0.7729	395.6	2.030	0.5784	395.4	2.005	5
10	2.3709	399.9	2.137	1.1831	399.8	2.079	0.7871	399.6	2.044	0.5891	399.4	2.020	10
15	2.4131	404.0	2.152	1.2043	403.8	2.093	0.8013	403.7	2.059	0.5998	403.5	2.034	15
20	2.4552	408.1	2.166	1.2254	407.9	2.107	0.8155	407.8	2.073	0.6105	407.6	2.048	20
25	2.4973	412.2	2.180	1.2466	412.1	2.121	0.8297	411.9	2.087	0.6212	411.8	2.062	25
30	2.5395	416.4	2.194	1.2678	416.3	2.135	0.8438	416.1	2.101	0.6319	416.0	2.076	30
35	2.5816	420.7	2.208	1.2889	420.5	2.149	0.8580	420.4	2.115	0.6425	420.2	2.090	35
40	2.6237	424.9	2.221	1.3100	424.8	2.163	0.8721	424.7	2.129	0.6532	424.5	2.104	40
45	2.6658	429.2	2.235	1.3312	429.1	2.177	0.8863	429.0	2.142	0.6638	428.9	2.118	45
50	2.7079	433.6	2.249	1.3523	433.5	2.190	0.9004	433.4	2.156	0.6745	433.2	2.131	50
55	2.7500	438.0	2.262	1.3734	437.9	2.204	0.9145	437.8	2.169	0.6851	437.6	2.145	55
60	2.7920	442.4	2.275	1.3945	442.3	2.217	0.9286	442.2	2.183	0.6957	442.1	2.158	60
65	2.8341	446.9	2.289	1.4156	446.8	2.230	0.9427	446.7	2.196	0.7063	446.6	2.172	65
70	2.8762	451.4	2.302	1.4367	451.3	2.244	0.9568	451.2	2.209	0.7169	451.1	2.185	70
75	2.9182	456.0	2.315	1.4577	455.9	2.257	0.9709	455.8	2.223	0.7275	455.7	2.198	75

ABSOLUTE PRESSURE, kPa

Temp °C	50			60			70			80			Temp °C
	-49.72 C			-46.39 C			-43.49 C			-40.90 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.3654	353.3	1.819	0.3079	355.3	1.813	0.2664	357.1	1.808	0.2350	358.7	1.804	
-45	0.3739	356.7	1.834	0.3100	356.4	1.817	-	-	-	-	-	-	-45
-40	0.3829	360.4	1.850	0.3176	360.1	1.834	0.2710	359.7	1.820	0.2360	359.4	1.807	-40
-35	0.3918	364.2	1.866	0.3252	363.8	1.850	0.2775	363.5	1.836	0.2418	363.2	1.823	-35
-30	0.4007	367.9	1.881	0.3326	367.6	1.865	0.2840	367.3	1.851	0.2476	367.0	1.839	-30
-25	0.4095	371.7	1.897	0.3401	371.4	1.881	0.2905	371.1	1.867	0.2533	370.9	1.855	-25
-20	0.4183	375.5	1.912	0.3474	375.3	1.896	0.2968	375.0	1.882	0.2589	374.7	1.870	-20
-15	0.4270	379.4	1.927	0.3548	379.1	1.911	0.3032	378.9	1.898	0.2645	378.7	1.886	-15
-10	0.4357	383.3	1.942	0.3621	383.0	1.926	0.3095	382.8	1.913	0.2701	382.6	1.901	-10
-5	0.4444	387.2	1.957	0.3694	387.0	1.941	0.3158	386.8	1.928	0.2756	386.6	1.916	-5
0	0.4531	391.2	1.972	0.3767	391.0	1.956	0.3221	390.8	1.942	0.2812	390.6	1.931	0
5	0.4617	395.2	1.986	0.3839	395.0	1.970	0.3284	394.8	1.957	0.2867	394.6	1.945	5
10	0.4704	399.2	2.001	0.3912	399.1	1.985	0.3346	398.9	1.971	0.2922	398.7	1.960	10
15	0.4790	403.3	2.015	0.3984	403.2	1.999	0.3408	403.0	1.986	0.2976	402.8	1.974	15
20	0.4876	407.5	2.029	0.4056	407.3	2.013	0.3470	407.1	2.000	0.3031	407.0	1.989	20
25	0.4961	411.6	2.043	0.4128	411.5	2.028	0.3532	411.3	2.014	0.3085	411.2	2.003	25
30	0.5047	415.9	2.057	0.4199	415.7	2.042	0.3594	415.6	2.028	0.3139	415.4	2.017	30
35	0.5133	420.1	2.071	0.4271	420.0	2.056	0.3655	419.8	2.042	0.3194	419.7	2.031	35
40	0.5218	424.4	2.085	0.4342	424.3	2.069	0.3717	424.1	2.056	0.3248	424.0	2.045	40
45	0.5304	428.7	2.099	0.4414	428.6	2.083	0.3778	428.5	2.070	0.3302	428.4	2.058	45
50	0.5389	433.1	2.112	0.4485	433.0	2.097	0.3840	432.9	2.084	0.3355	432.7	2.072	50
55	0.5474	437.5	2.126	0.4556	437.4	2.110	0.3901	437.3	2.097	0.3409	437.2	2.086	55
60	0.5559	442.0	2.139	0.4628	441.9	2.124	0.3962	441.8	2.111	0.3463	441.6	2.099	60
65	0.5644	446.5	2.153	0.4699	446.4	2.137	0.4023	446.3	2.124	0.3516	446.2	2.113	65
70	0.5729	451.0	2.166	0.4770	450.9	2.151	0.4084	450.8	2.137	0.3570	450.7	2.126	70
75	0.5814	455.6	2.179	0.4841	455.5	2.164	0.4145	455.4	2.151	0.3624	455.3	2.139	75
80	0.5899	460.2	2.193	0.4912	460.1	2.177	0.4206	460.0	2.164	0.3677	459.9	2.153	80
85	0.5984	464.9	2.206	0.4982	464.8	2.190	0.4267	464.7	2.177	0.3730	464.6	2.166	85
90	0.6069	469.6	2.219	0.5053	469.5	2.203	0.4328	469.4	2.190	0.3784	469.3	2.179	90
95	0.6154	474.3	2.232	0.5124	474.2	2.216	0.4389	474.1	2.203	0.3837	474.0	2.192	95
100	0.6238	479.1	2.245	0.5195	479.0	2.229	0.4449	478.9	2.216	0.3890	478.8	2.205	100

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg H = Enthalpy in kJ/kg S = Entropy in kJ/kg.K Saturation Properties in Light Green

ABSOLUTE PRESSURE, kPa

Temp °C	90 kPa			100 kPa			101.325 kPa			110 kPa			Temp °C
	-38.56 °C			-36.41 °C			-36.14 °C			-34.43 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.2103	360.1	1.801	0.1905	361.4	1.798	0.1881	361.6	1.798	0.1741	362.6	1.795	
-35	0.2140	362.9	1.812	0.1918	362.5	1.802	0.1892	362.5	1.801	-	-	-	-35
-30	0.2192	366.7	1.828	0.1965	366.4	1.819	0.1938	366.4	1.817	0.1779	366.1	1.810	-30
-25	0.2243	370.6	1.844	0.2012	370.3	1.835	0.1984	370.3	1.833	0.1822	370.0	1.826	-25
-20	0.2294	374.5	1.860	0.2058	374.2	1.850	0.2030	374.2	1.849	0.1864	374.0	1.841	-20
-15	0.2344	378.4	1.875	0.2103	378.2	1.866	0.2075	378.1	1.864	0.1906	377.9	1.857	-15
-10	0.2394	382.4	1.890	0.2149	382.1	1.881	0.2120	382.1	1.880	0.1948	381.9	1.872	-10
-5	0.2444	386.4	1.905	0.2194	386.1	1.896	0.2164	386.1	1.895	0.1989	385.9	1.887	-5
0	0.2493	390.4	1.920	0.2239	390.2	1.911	0.2209	390.1	1.910	0.2030	390.0	1.902	0
5	0.2542	394.4	1.935	0.2283	394.2	1.926	0.2253	394.2	1.924	0.2071	394.1	1.917	5
10	0.2592	398.5	1.949	0.2327	398.3	1.940	0.2296	398.3	1.939	0.2111	398.2	1.932	10
15	0.2640	402.7	1.964	0.2372	402.5	1.955	0.2340	402.5	1.953	0.2152	402.3	1.946	15
20	0.2689	406.8	1.978	0.2416	406.7	1.969	0.2384	406.6	1.968	0.2192	406.5	1.961	20
25	0.2738	411.0	1.992	0.2460	410.9	1.983	0.2427	410.9	1.982	0.2232	410.7	1.975	25
30	0.2786	415.3	2.007	0.2503	415.1	1.997	0.2470	415.1	1.996	0.2272	415.0	1.989	30
35	0.2834	419.5	2.021	0.2547	419.4	2.011	0.2513	419.4	2.010	0.2312	419.3	2.003	35
40	0.2883	423.9	2.034	0.2591	423.7	2.025	0.2556	423.7	2.024	0.2352	423.6	2.017	40
45	0.2931	428.2	2.048	0.2634	428.1	2.039	0.2599	428.1	2.038	0.2391	428.0	2.031	45
50	0.2979	432.6	2.062	0.2678	432.5	2.053	0.2642	432.5	2.052	0.2431	432.4	2.045	50
55	0.3027	437.1	2.076	0.2721	436.9	2.067	0.2685	436.9	2.065	0.2470	436.8	2.058	55
60	0.3075	441.5	2.089	0.2764	441.4	2.080	0.2727	441.4	2.079	0.2510	441.3	2.072	60
65	0.3122	446.0	2.103	0.2807	445.9	2.094	0.2770	445.9	2.092	0.2549	445.8	2.085	65
70	0.3170	450.6	2.116	0.2850	450.5	2.107	0.2813	450.5	2.106	0.2589	450.4	2.099	70
75	0.3218	455.2	2.129	0.2893	455.1	2.120	0.2855	455.1	2.119	0.2628	455.0	2.112	75
80	0.3265	459.8	2.142	0.2936	459.7	2.133	0.2898	459.7	2.132	0.2667	459.6	2.125	80
85	0.3313	464.5	2.156	0.2979	464.4	2.147	0.2940	464.4	2.145	0.2706	464.3	2.138	85
90	0.3361	469.2	2.169	0.3022	469.1	2.160	0.2982	469.1	2.159	0.2745	469.0	2.151	90
95	0.3408	473.9	2.182	0.3065	473.9	2.173	0.3024	473.8	2.171	0.2784	473.8	2.164	95
100	0.3456	478.7	2.195	0.3108	478.6	2.186	0.3067	478.6	2.184	0.2823	478.6	2.177	100
105	0.3503	483.6	2.207	0.3150	483.5	2.198	0.3109	483.5	2.197	0.2862	483.4	2.190	105
110	0.3550	488.4	2.220	0.3193	488.3	2.211	0.3151	488.3	2.210	0.2901	488.3	2.203	110

ABSOLUTE PRESSURE, kPa

Temp °C	120 kPa			130 kPa			140 kPa			150 kPa			Temp °C
	-32.58 C			-30.86 C			-29.23 C			-27.69 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.1604	363.7	1.793	0.1487	364.8	1.791	0.1386	365.7	1.789	0.1298	366.7	1.787	
-30	0.1624	365.8	1.801	0.1493	365.5	1.794	-	-	-	-	-	-	-30
-25	0.1664	369.7	1.817	0.1530	369.4	1.810	0.1416	369.1	1.803	0.1316	368.8	1.796	-25
-20	0.1703	373.7	1.833	0.1567	373.4	1.826	0.1450	373.1	1.819	0.1348	372.9	1.812	-20
-15	0.1742	377.7	1.849	0.1603	377.4	1.841	0.1484	377.2	1.834	0.1380	376.9	1.828	-15
-10	0.1780	381.7	1.864	0.1639	381.4	1.857	0.1517	381.2	1.850	0.1412	381.0	1.843	-10
-5	0.1818	385.7	1.879	0.1674	385.5	1.872	0.1550	385.3	1.865	0.1443	385.0	1.859	-5
0	0.1856	389.8	1.894	0.1709	389.6	1.887	0.1583	389.4	1.880	0.1474	389.1	1.874	0
5	0.1894	393.9	1.909	0.1744	393.7	1.902	0.1616	393.5	1.895	0.1505	393.3	1.889	5
10	0.1931	398.0	1.924	0.1779	397.8	1.917	0.1648	397.6	1.910	0.1535	397.4	1.904	10
15	0.1969	402.1	1.938	0.1814	402.0	1.931	0.1681	401.8	1.925	0.1565	401.6	1.918	15
20	0.2006	406.3	1.953	0.1848	406.2	1.946	0.1713	406.0	1.939	0.1596	405.8	1.933	20
25	0.2043	410.6	1.967	0.1882	410.4	1.960	0.1745	410.2	1.953	0.1626	410.1	1.947	25
30	0.2079	414.8	1.981	0.1916	414.7	1.974	0.1777	414.5	1.968	0.1655	414.4	1.962	30
35	0.2116	419.1	1.995	0.1950	419.0	1.988	0.1808	418.8	1.982	0.1685	418.7	1.976	35
40	0.2153	423.5	2.009	0.1984	423.3	2.002	0.1840	423.2	1.996	0.1715	423.1	1.990	40
45	0.2189	427.8	2.023	0.2018	427.7	2.016	0.1871	427.6	2.010	0.1744	427.5	2.004	45
50	0.2226	432.3	2.037	0.2052	432.1	2.030	0.1903	432.0	2.024	0.1774	431.9	2.017	50
55	0.2262	436.7	2.051	0.2085	436.6	2.044	0.1934	436.5	2.037	0.1803	436.3	2.031	55
60	0.2298	441.2	2.064	0.2119	441.1	2.057	0.1965	441.0	2.051	0.1832	440.9	2.045	60
65	0.2334	445.7	2.078	0.2152	445.6	2.071	0.1996	445.5	2.064	0.1861	445.4	2.058	65
70	0.2370	450.3	2.091	0.2186	450.2	2.084	0.2028	450.1	2.078	0.1890	450.0	2.072	70
75	0.2406	454.9	2.104	0.2219	454.8	2.098	0.2059	454.7	2.091	0.1920	454.6	2.085	75
80	0.2442	459.5	2.118	0.2252	459.4	2.111	0.2090	459.3	2.104	0.1949	459.2	2.098	80
85	0.2478	464.2	2.131	0.2286	464.1	2.124	0.2121	464.0	2.118	0.1977	463.9	2.112	85
90	0.2514	468.9	2.144	0.2319	468.8	2.137	0.2151	468.7	2.131	0.2006	468.7	2.125	90
95	0.2550	473.7	2.157	0.2352	473.6	2.150	0.2182	473.5	2.144	0.2035	473.4	2.138	95
100	0.2586	478.5	2.170	0.2385	478.4	2.163	0.2213	478.3	2.157	0.2064	478.2	2.151	100
105	0.2622	483.3	2.183	0.2418	483.2	2.176	0.2244	483.1	2.170	0.2093	483.1	2.164	105
110	0.2657	488.2	2.196	0.2451	488.1	2.189	0.2275	488.0	2.182	0.2122	487.9	2.176	110
115	0.2693	493.1	2.208	0.2484	493.0	2.201	0.2305	492.9	2.195	0.2150	492.9	2.189	115

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	160 kPa			170 kPa			180 kPa			190 kPa			Temp °C
	-26.23 °C			-24.84 °C			-23.52 °C			-22.25 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.1221	**367.5**	**1.786**	**0.1153**	**368.4**	**1.784**	**0.1092**	**369.1**	**1.783**	**0.1037**	**369.9**	**1.781**	
-25	0.1229	368.5	1.790	-	-	-	-	-	-	-	-	-	-25
-20	0.1260	372.6	1.806	0.1181	372.3	1.800	0.1112	372.0	1.794	0.1049	371.7	1.789	-20
-15	0.1290	376.7	1.822	0.1210	376.4	1.816	0.1139	376.1	1.810	0.1076	375.9	1.805	-15
-10	0.1320	380.7	1.837	0.1238	380.5	1.832	0.1166	380.2	1.826	0.1101	380.0	1.821	-10
-5	0.1349	384.8	1.853	0.1266	384.6	1.847	0.1193	384.4	1.842	0.1127	384.1	1.836	-5
0	0.1378	388.9	1.868	0.1294	388.7	1.862	0.1219	388.5	1.857	0.1152	388.3	1.852	0
5	0.1407	393.1	1.883	0.1321	392.9	1.877	0.1245	392.7	1.872	0.1177	392.5	1.867	5
10	0.1436	397.2	1.898	0.1349	397.1	1.892	0.1271	396.9	1.887	0.1201	396.7	1.882	10
15	0.1465	401.4	1.913	0.1376	401.3	1.907	0.1297	401.1	1.902	0.1226	400.9	1.897	15
20	0.1493	405.7	1.927	0.1403	405.5	1.922	0.1322	405.3	1.916	0.1250	405.2	1.911	20
25	0.1521	409.9	1.942	0.1429	409.8	1.936	0.1347	409.6	1.931	0.1274	409.5	1.926	25
30	0.1549	414.2	1.956	0.1456	414.1	1.950	0.1373	413.9	1.945	0.1298	413.8	1.940	30
35	0.1577	418.6	1.970	0.1482	418.4	1.965	0.1398	418.3	1.959	0.1322	418.1	1.955	35
40	0.1605	422.9	1.984	0.1509	422.8	1.979	0.1423	422.6	1.973	0.1346	422.5	1.969	40
45	0.1633	427.3	1.998	0.1535	427.2	1.993	0.1448	427.1	1.987	0.1369	426.9	1.983	45
50	0.1661	431.8	2.012	0.1561	431.6	2.006	0.1472	431.5	2.001	0.1393	431.4	1.997	50
55	0.1688	436.2	2.026	0.1587	436.1	2.020	0.1497	436.0	2.015	0.1416	435.9	2.010	55
60	0.1716	440.7	2.039	0.1613	440.6	2.034	0.1522	440.5	2.029	0.1440	440.4	2.024	60
65	0.1743	445.3	2.053	0.1639	445.2	2.047	0.1546	445.1	2.042	0.1463	445.0	2.038	65
70	0.1771	449.9	2.066	0.1665	449.8	2.061	0.1571	449.7	2.056	0.1486	449.5	2.051	70
75	0.1798	454.5	2.080	0.1690	454.4	2.074	0.1595	454.3	2.069	0.1510	454.2	2.064	75
80	0.1825	459.1	2.093	0.1716	459.0	2.088	0.1619	458.9	2.083	0.1533	458.8	2.078	80
85	0.1852	463.8	2.106	0.1742	463.7	2.101	0.1644	463.6	2.096	0.1556	463.6	2.091	85
90	0.1879	468.6	2.119	0.1767	468.5	2.114	0.1668	468.4	2.109	0.1579	468.3	2.104	90
95	0.1907	473.3	2.132	0.1793	473.2	2.127	0.1692	473.2	2.122	0.1602	473.1	2.117	95
100	0.1934	478.1	2.145	0.1818	478.1	2.140	0.1716	478.0	2.135	0.1625	477.9	2.130	100
105	0.1961	483.0	2.158	0.1844	482.9	2.153	0.1740	482.8	2.148	0.1647	482.7	2.143	105
110	0.1988	487.9	2.171	0.1869	487.8	2.166	0.1764	487.7	2.161	0.1670	487.6	2.156	110
115	0.2015	492.8	2.184	0.1895	492.7	2.178	0.1788	492.6	2.173	0.1693	492.6	2.169	115
120	0.2041	497.7	2.196	0.1920	497.7	2.191	0.1812	497.6	2.186	0.1716	497.5	2.181	120

ABSOLUTE PRESSURE, kPa

Temp °C	200 kPa			210 kPa			220 kPa			230 kPa			Temp °C
	-21.03 C			-19.85 C			-18.72 C			-17.63 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0988	**370.6**	**1.780**	**0.0943**	**371.3**	**1.779**	**0.0902**	**371.9**	**1.778**	**0.0865**	**372.6**	**1.777**	
-20	0.0993	371.4	1.784	-	-	-	-	-	-	-	-	-	-20
-15	0.1018	375.6	1.800	0.0967	375.3	1.795	0.0919	375.1	1.790	0.0876	374.8	1.786	-15
-10	0.1043	379.8	1.816	0.0990	379.5	1.811	0.0942	379.3	1.806	0.0898	379.0	1.802	-10
-5	0.1067	383.9	1.832	0.1014	383.7	1.827	0.0965	383.5	1.822	0.0920	383.2	1.818	-5
0	0.1091	388.1	1.847	0.1037	387.9	1.842	0.0987	387.7	1.838	0.0942	387.4	1.833	0
5	0.1115	392.3	1.862	0.1060	392.1	1.858	0.1009	391.9	1.853	0.0963	391.7	1.849	5
10	0.1139	396.5	1.877	0.1082	396.3	1.873	0.1031	396.1	1.868	0.0984	395.9	1.864	10
15	0.1162	400.7	1.892	0.1104	400.6	1.887	0.1052	400.4	1.883	0.1004	400.2	1.879	15
20	0.1185	405.0	1.907	0.1127	404.8	1.902	0.1073	404.7	1.898	0.1025	404.5	1.894	20
25	0.1208	409.3	1.921	0.1149	409.1	1.917	0.1095	409.0	1.912	0.1045	408.8	1.908	25
30	0.1231	413.6	1.936	0.1171	413.5	1.931	0.1115	413.3	1.927	0.1065	413.2	1.923	30
35	0.1254	418.0	1.950	0.1192	417.8	1.945	0.1136	417.7	1.941	0.1085	417.5	1.937	35
40	0.1277	422.4	1.964	0.1214	422.2	1.960	0.1157	422.1	1.955	0.1105	422.0	1.951	40
45	0.1299	426.8	1.978	0.1236	426.7	1.974	0.1178	426.5	1.969	0.1125	426.4	1.965	45
50	0.1322	431.3	1.992	0.1257	431.1	1.988	0.1198	431.0	1.983	0.1145	430.9	1.979	50
55	0.1344	435.7	2.006	0.1278	435.6	2.001	0.1219	435.5	1.997	0.1164	435.4	1.993	55
60	0.1366	440.3	2.019	0.1300	440.2	2.015	0.1239	440.0	2.011	0.1184	439.9	2.007	60
65	0.1388	444.8	2.033	0.1321	444.7	2.029	0.1259	444.6	2.025	0.1203	444.5	2.021	65
70	0.1411	449.4	2.047	0.1342	449.3	2.042	0.1280	449.2	2.038	0.1223	449.1	2.034	70
75	0.1433	454.1	2.060	0.1363	454.0	2.056	0.1300	453.9	2.052	0.1242	453.8	2.048	75
80	0.1455	458.7	2.073	0.1384	458.7	2.069	0.1320	458.6	2.065	0.1261	458.5	2.061	80
85	0.1477	463.5	2.087	0.1405	463.4	2.082	0.1340	463.3	2.078	0.1281	463.2	2.074	85
90	0.1499	468.2	2.100	0.1426	468.1	2.095	0.1360	468.0	2.091	0.1300	467.9	2.087	90
95	0.1520	473.0	2.113	0.1447	472.9	2.108	0.1380	472.8	2.104	0.1319	472.7	2.100	95
100	0.1542	477.8	2.126	0.1468	477.7	2.121	0.1400	477.6	2.117	0.1338	477.5	2.114	100
105	0.1564	482.7	2.139	0.1488	482.6	2.134	0.1420	482.5	2.130	0.1357	482.4	2.126	105
110	0.1586	487.5	2.152	0.1509	487.5	2.147	0.1440	487.4	2.143	0.1376	487.3	2.139	110
115	0.1607	492.5	2.164	0.1530	492.4	2.160	0.1459	492.3	2.156	0.1395	492.2	2.152	115
120	0.1629	497.4	2.177	0.1551	497.4	2.173	0.1479	497.3	2.169	0.1414	497.2	2.165	120
125	0.1651	502.4	2.190	0.1571	502.4	2.185	0.1499	502.3	2.181	0.1433	502.2	2.178	125

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	240 kPa (-16.57 °C) V	H	S	250 kPa (-15.55 °C) V	H	S	260 kPa (-14.56 °C) V	H	S	270 kPa (-13.60 °C) V	H	S	Temp °C
	0.0830	**373.2**	**1.776**	**0.0798**	**373.8**	**1.775**	**0.0769**	**374.3**	**1.774**	**0.0741**	**374.9**	**1.774**	
-15	0.0837	374.5	1.781	0.0801	374.2	1.777	-	-	-	-	-	-	-15
-10	0.0858	378.7	1.798	0.0821	378.5	1.794	0.0787	378.2	1.789	0.0755	378.0	1.786	-10
-5	0.0879	383.0	1.814	0.0842	382.7	1.810	0.0807	382.5	1.806	0.0775	382.3	1.802	-5
0	0.0900	387.2	1.829	0.0862	387.0	1.825	0.0826	386.8	1.821	0.0793	386.6	1.818	0
5	0.0920	391.5	1.845	0.0881	391.3	1.841	0.0845	391.1	1.837	0.0812	390.8	1.833	5
10	0.0940	395.7	1.860	0.0901	395.5	1.856	0.0864	395.3	1.852	0.0830	395.1	1.848	10
15	0.0960	400.0	1.875	0.0920	399.8	1.871	0.0883	399.6	1.867	0.0848	399.5	1.864	15
20	0.0980	404.3	1.890	0.0939	404.1	1.886	0.0901	404.0	1.882	0.0866	403.8	1.878	20
25	0.1000	408.7	1.904	0.0958	408.5	1.901	0.0919	408.3	1.897	0.0884	408.2	1.893	25
30	0.1019	413.0	1.919	0.0977	412.9	1.915	0.0937	412.7	1.911	0.0901	412.5	1.908	30
35	0.1038	417.4	1.933	0.0995	417.3	1.929	0.0955	417.1	1.926	0.0918	417.0	1.922	35
40	0.1057	421.8	1.947	0.1014	421.7	1.944	0.0973	421.5	1.940	0.0936	421.4	1.937	40
45	0.1077	426.3	1.962	0.1032	426.1	1.958	0.0991	426.0	1.954	0.0953	425.9	1.951	45
50	0.1096	430.7	1.975	0.1050	430.6	1.972	0.1009	430.5	1.968	0.0970	430.4	1.965	50
55	0.1114	435.3	1.989	0.1068	435.1	1.986	0.1026	435.0	1.982	0.0987	434.9	1.979	55
60	0.1133	439.8	2.003	0.1087	439.7	1.999	0.1044	439.6	1.996	0.1004	439.5	1.992	60
65	0.1152	444.4	2.017	0.1105	444.3	2.013	0.1061	444.2	2.010	0.1020	444.1	2.006	65
70	0.1171	449.0	2.030	0.1123	448.9	2.027	0.1078	448.8	2.023	0.1037	448.7	2.020	70
75	0.1189	453.7	2.044	0.1140	453.6	2.040	0.1095	453.5	2.037	0.1054	453.4	2.033	75
80	0.1208	458.4	2.057	0.1158	458.3	2.054	0.1113	458.2	2.050	0.1070	458.1	2.047	80
85	0.1226	463.1	2.070	0.1176	463.0	2.067	0.1130	462.9	2.063	0.1087	462.8	2.060	85
90	0.1245	467.8	2.084	0.1194	467.7	2.080	0.1147	467.7	2.077	0.1103	467.6	2.073	90
95	0.1263	472.6	2.097	0.1211	472.5	2.093	0.1164	472.5	2.090	0.1120	472.4	2.086	95
100	0.1281	477.5	2.110	0.1229	477.4	2.106	0.1181	477.3	2.103	0.1136	477.2	2.099	100
105	0.1300	482.3	2.123	0.1247	482.2	2.119	0.1198	482.2	2.116	0.1153	482.1	2.112	105
110	0.1318	487.2	2.136	0.1264	487.2	2.132	0.1215	487.1	2.129	0.1169	487.0	2.125	110
115	0.1336	492.2	2.148	0.1282	492.1	2.145	0.1232	492.0	2.141	0.1185	491.9	2.138	115
120	0.1354	497.1	2.161	0.1299	497.1	2.158	0.1248	497.0	2.154	0.1201	496.9	2.151	120
125	0.1372	502.2	2.174	0.1317	502.1	2.170	0.1265	502.0	2.167	0.1218	501.9	2.164	125
130	0.1391	507.2	2.186	0.1334	507.1	2.183	0.1282	507.1	2.179	0.1234	507.0	2.176	130

ABSOLUTE PRESSURE, kPa

Temp °C	280 kPa (-12.66 C) V	H	S	290 kPa (-11.75 C) V	H	S	300 kPa (-10.87 C) V	H	S	310 kPa (-10.01 C) V	H	S	Temp °C
	0.0716	**375.4**	**1.773**	**0.0692**	**375.9**	**1.772**	**0.0670**	**376.4**	**1.771**	**0.0649**	**376.9**	**1.771**	
-10	0.0726	377.7	1.782	0.0699	377.4	1.778	0.0673	377.2	1.774	0.0649	376.9	1.771	-10
-5	0.0745	382.0	1.798	0.0717	381.8	1.794	0.0691	381.5	1.791	0.0666	381.3	1.787	-5
0	0.0763	386.3	1.814	0.0735	386.1	1.810	0.0708	385.9	1.807	0.0683	385.6	1.803	0
5	0.0781	390.6	1.830	0.0752	390.4	1.826	0.0725	390.2	1.823	0.0700	390.0	1.819	5
10	0.0799	394.9	1.845	0.0769	394.8	1.841	0.0742	394.6	1.838	0.0716	394.4	1.835	10
15	0.0816	399.3	1.860	0.0786	399.1	1.857	0.0758	398.9	1.853	0.0732	398.7	1.850	15
20	0.0833	403.6	1.875	0.0803	403.5	1.872	0.0775	403.3	1.868	0.0748	403.1	1.865	20
25	0.0850	408.0	1.890	0.0820	407.8	1.886	0.0791	407.7	1.883	0.0764	407.5	1.880	25
30	0.0867	412.4	1.904	0.0836	412.2	1.901	0.0807	412.1	1.898	0.0779	411.9	1.895	30
35	0.0884	416.8	1.919	0.0852	416.7	1.916	0.0823	416.5	1.912	0.0795	416.4	1.909	35
40	0.0901	421.3	1.933	0.0869	421.1	1.930	0.0838	421.0	1.927	0.0810	420.8	1.924	40
45	0.0918	425.7	1.947	0.0885	425.6	1.944	0.0854	425.5	1.941	0.0825	425.3	1.938	45
50	0.0934	430.2	1.961	0.0901	430.1	1.958	0.0869	430.0	1.955	0.0840	429.9	1.952	50
55	0.0950	434.8	1.975	0.0916	434.7	1.972	0.0885	434.5	1.969	0.0855	434.4	1.966	55
60	0.0967	439.3	1.989	0.0932	439.2	1.986	0.0900	439.1	1.983	0.0870	439.0	1.980	60
65	0.0983	443.9	2.003	0.0948	443.8	2.000	0.0915	443.7	1.997	0.0885	443.6	1.994	65
70	0.0999	448.6	2.016	0.0964	448.5	2.013	0.0930	448.4	2.010	0.0900	448.3	2.007	70
75	0.1015	453.3	2.030	0.0979	453.2	2.027	0.0946	453.0	2.024	0.0914	452.9	2.021	75
80	0.1031	458.0	2.043	0.0995	457.9	2.040	0.0961	457.8	2.037	0.0929	457.7	2.034	80
85	0.1047	462.7	2.057	0.1010	462.6	2.054	0.0976	462.5	2.051	0.0943	462.4	2.048	85
90	0.1063	467.5	2.070	0.1026	467.4	2.067	0.0991	467.3	2.064	0.0958	467.2	2.061	90
95	0.1079	472.3	2.083	0.1041	472.2	2.080	0.1005	472.1	2.077	0.0972	472.0	2.074	95
100	0.1095	477.1	2.096	0.1056	477.0	2.093	0.1020	476.9	2.090	0.0987	476.9	2.087	100
105	0.1111	482.0	2.109	0.1072	481.9	2.106	0.1035	481.8	2.103	0.1001	481.7	2.100	105
110	0.1126	486.9	2.122	0.1087	486.8	2.119	0.1050	486.7	2.116	0.1015	486.7	2.113	110
115	0.1142	491.9	2.135	0.1102	491.8	2.132	0.1065	491.7	2.129	0.1030	491.6	2.126	115
120	0.1158	496.8	2.148	0.1117	496.8	2.145	0.1079	496.7	2.142	0.1044	496.6	2.139	120
125	0.1174	501.9	2.160	0.1132	501.8	2.157	0.1094	501.7	2.154	0.1058	501.6	2.151	125
130	0.1189	506.9	2.173	0.1147	506.8	2.170	0.1109	506.8	2.167	0.1072	506.7	2.164	130
135	0.1205	512.0	2.186	0.1163	511.9	2.182	0.1123	511.9	2.179	0.1086	511.8	2.177	135

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	320			330			340			350			Temp °C
	-9.16 °C			-8.34 °C			-7.54 °C			-6.75 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0630	**377.4**	**1.770**	**0.0611**	**377.8**	**1.770**	**0.0594**	**378.3**	**1.769**	**0.0577**	**378.7**	**1.768**	
-5	0.0644	381.0	1.784	0.0622	380.8	1.781	0.0602	380.5	1.777	0.0583	380.3	1.774	-5
0	0.0660	385.4	1.800	0.0638	385.2	1.797	0.0618	384.9	1.794	0.0598	384.7	1.791	0
5	0.0676	389.8	1.816	0.0654	389.6	1.813	0.0633	389.3	1.810	0.0613	389.1	1.807	5
10	0.0692	394.2	1.832	0.0670	394.0	1.828	0.0648	393.7	1.825	0.0628	393.5	1.822	10
15	0.0708	398.5	1.847	0.0685	398.3	1.844	0.0663	398.2	1.841	0.0643	398.0	1.838	15
20	0.0723	402.9	1.862	0.0700	402.7	1.859	0.0678	402.6	1.856	0.0657	402.4	1.853	20
25	0.0739	407.3	1.877	0.0715	407.2	1.874	0.0692	407.0	1.871	0.0671	406.8	1.868	25
30	0.0754	411.8	1.892	0.0730	411.6	1.889	0.0707	411.4	1.886	0.0685	411.3	1.883	30
35	0.0769	416.2	1.906	0.0744	416.1	1.903	0.0721	415.9	1.900	0.0699	415.8	1.898	35
40	0.0783	420.7	1.921	0.0759	420.5	1.918	0.0735	420.4	1.915	0.0713	420.3	1.912	40
45	0.0798	425.2	1.935	0.0773	425.1	1.932	0.0749	424.9	1.929	0.0727	424.8	1.926	45
50	0.0813	429.7	1.949	0.0787	429.6	1.946	0.0763	429.5	1.943	0.0740	429.3	1.941	50
55	0.0827	434.3	1.963	0.0801	434.2	1.960	0.0777	434.0	1.957	0.0754	433.9	1.955	55
60	0.0842	438.9	1.977	0.0815	438.8	1.974	0.0790	438.6	1.971	0.0767	438.5	1.969	60
65	0.0856	443.5	1.991	0.0829	443.4	1.988	0.0804	443.3	1.985	0.0780	443.2	1.982	65
70	0.0870	448.2	2.004	0.0843	448.0	2.002	0.0818	447.9	1.999	0.0793	447.8	1.996	70
75	0.0885	452.8	2.018	0.0857	452.7	2.015	0.0831	452.6	2.012	0.0806	452.5	2.010	75
80	0.0899	457.6	2.031	0.0871	457.5	2.029	0.0844	457.4	2.026	0.0819	457.3	2.023	80
85	0.0913	462.3	2.045	0.0885	462.2	2.042	0.0858	462.1	2.039	0.0832	462.0	2.037	85
90	0.0927	467.1	2.058	0.0898	467.0	2.055	0.0871	466.9	2.053	0.0845	466.8	2.050	90
95	0.0941	471.9	2.071	0.0912	471.8	2.068	0.0884	471.7	2.066	0.0858	471.7	2.063	95
100	0.0955	476.8	2.084	0.0925	476.7	2.082	0.0897	476.6	2.079	0.0871	476.5	2.076	100
105	0.0969	481.7	2.097	0.0939	481.6	2.095	0.0911	481.5	2.092	0.0884	481.4	2.089	105
110	0.0983	486.6	2.110	0.0952	486.5	2.108	0.0924	486.4	2.105	0.0897	486.3	2.102	110
115	0.0997	491.5	2.123	0.0966	491.5	2.120	0.0937	491.4	2.118	0.0909	491.3	2.115	115
120	0.1011	496.5	2.136	0.0979	496.5	2.133	0.0950	496.4	2.131	0.0922	496.3	2.128	120
125	0.1024	501.6	2.149	0.0993	501.5	2.146	0.0963	501.4	2.143	0.0935	501.4	2.141	125
130	0.1038	506.6	2.161	0.1006	506.6	2.159	0.0976	506.5	2.156	0.0948	506.4	2.153	130
135	0.1052	511.7	2.174	0.1019	511.7	2.171	0.0989	511.6	2.168	0.0960	511.5	2.166	135
140	0.1066	516.9	2.186	0.1033	516.8	2.184	0.1002	516.7	2.181	0.0973	516.7	2.178	140

ABSOLUTE PRESSURE, kPa

Temp °C	360			370			380			390			Temp °C
	-5.98 C			-5.23 C			-4.49 C			-3.77 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0562	**379.1**	**1.768**	**0.0547**	**379.5**	**1.767**	**0.0533**	**379.9**	**1.767**	**0.0520**	**380.3**	**1.766**	
-5	0.0565	380.0	1.771	0.0548	379.7	1.768	-	-	-	-	-	-	-5
0	0.0580	384.5	1.788	0.0563	384.2	1.785	0.0546	384.0	1.782	0.0530	383.7	1.779	0
5	0.0595	388.9	1.804	0.0577	388.7	1.801	0.0560	388.5	1.798	0.0544	388.2	1.795	5
10	0.0609	393.3	1.820	0.0591	393.1	1.817	0.0574	392.9	1.814	0.0558	392.7	1.811	10
15	0.0623	397.8	1.835	0.0605	397.6	1.832	0.0588	397.4	1.830	0.0572	397.2	1.827	15
20	0.0638	402.2	1.850	0.0619	402.0	1.848	0.0601	401.8	1.845	0.0585	401.7	1.842	20
25	0.0651	406.7	1.865	0.0633	406.5	1.863	0.0615	406.3	1.860	0.0598	406.1	1.857	25
30	0.0665	411.1	1.880	0.0646	411.0	1.878	0.0628	410.8	1.875	0.0611	410.6	1.872	30
35	0.0679	415.6	1.895	0.0659	415.5	1.892	0.0641	415.3	1.890	0.0623	415.1	1.887	35
40	0.0692	420.1	1.909	0.0672	420.0	1.907	0.0654	419.8	1.904	0.0636	419.7	1.902	40
45	0.0705	424.6	1.924	0.0685	424.5	1.921	0.0666	424.4	1.919	0.0648	424.2	1.916	45
50	0.0719	429.2	1.938	0.0698	429.1	1.935	0.0679	428.9	1.933	0.0661	428.8	1.930	50
55	0.0732	433.8	1.952	0.0711	433.7	1.949	0.0691	433.5	1.947	0.0673	433.4	1.944	55
60	0.0745	438.4	1.966	0.0724	438.3	1.963	0.0704	438.2	1.961	0.0685	438.0	1.958	60
65	0.0758	443.0	1.980	0.0736	442.9	1.977	0.0716	442.8	1.975	0.0697	442.7	1.972	65
70	0.0770	447.7	1.994	0.0749	447.6	1.991	0.0728	447.5	1.989	0.0709	447.4	1.986	70
75	0.0783	452.4	2.007	0.0761	452.3	2.005	0.0740	452.2	2.002	0.0721	452.1	2.000	75
80	0.0796	457.2	2.021	0.0774	457.1	2.018	0.0753	457.0	2.016	0.0733	456.9	2.013	80
85	0.0809	461.9	2.034	0.0786	461.8	2.032	0.0765	461.7	2.029	0.0744	461.6	2.027	85
90	0.0821	466.7	2.047	0.0798	466.6	2.045	0.0777	466.5	2.042	0.0756	466.4	2.040	90
95	0.0834	471.6	2.061	0.0811	471.5	2.058	0.0789	471.4	2.056	0.0768	471.3	2.053	95
100	0.0846	476.4	2.074	0.0823	476.3	2.071	0.0801	476.3	2.069	0.0779	476.2	2.067	100
105	0.0859	481.3	2.087	0.0835	481.2	2.084	0.0812	481.2	2.082	0.0791	481.1	2.080	105
110	0.0871	486.3	2.100	0.0847	486.2	2.097	0.0824	486.1	2.095	0.0803	486.0	2.093	110
115	0.0884	491.2	2.113	0.0859	491.2	2.110	0.0836	491.1	2.108	0.0814	491.0	2.105	115
120	0.0896	496.2	2.125	0.0871	496.2	2.123	0.0848	496.1	2.121	0.0826	496.0	2.118	120
125	0.0908	501.3	2.138	0.0883	501.2	2.136	0.0859	501.1	2.133	0.0837	501.1	2.131	125
130	0.0921	506.3	2.151	0.0895	506.3	2.148	0.0871	506.2	2.146	0.0848	506.1	2.144	130
135	0.0933	511.5	2.163	0.0907	511.4	2.161	0.0883	511.3	2.159	0.0860	511.2	2.156	135
140	0.0945	516.6	2.176	0.0919	516.5	2.174	0.0895	516.5	2.171	0.0871	516.4	2.169	140

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	400 kPa (Temp -3.06 °C)			425 kPa (-1.35 °C)			450 kPa (0.29 °C)			475 kPa (1.86 °C)			Temp °C
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0507	**380.7**	**1.766**	**0.0478**	**381.6**	**1.765**	**0.0452**	**382.5**	**1.764**	**0.0428**	**383.3**	**1.763**	
0	0.0516	383.5	1.776	0.0481	382.9	1.769	-	-	-	-	-	-	0
5	0.0529	388.0	1.792	0.0495	387.4	1.786	0.0464	386.9	1.779	0.0436	386.3	1.773	5
10	0.0543	392.5	1.808	0.0508	392.0	1.802	0.0476	391.4	1.796	0.0448	390.9	1.790	10
15	0.0556	397.0	1.824	0.0520	396.5	1.818	0.0488	396.0	1.812	0.0460	395.5	1.806	15
20	0.0569	401.5	1.840	0.0533	401.0	1.833	0.0500	400.6	1.827	0.0471	400.1	1.822	20
25	0.0582	406.0	1.855	0.0545	405.5	1.849	0.0512	405.1	1.843	0.0482	404.7	1.837	25
30	0.0594	410.5	1.870	0.0557	410.1	1.864	0.0523	409.7	1.858	0.0493	409.2	1.852	30
35	0.0607	415.0	1.885	0.0568	414.6	1.879	0.0535	414.2	1.873	0.0504	413.8	1.867	35
40	0.0619	419.5	1.899	0.0580	419.2	1.893	0.0546	418.8	1.888	0.0515	418.4	1.882	40
45	0.0631	424.1	1.914	0.0592	423.7	1.908	0.0557	423.4	1.902	0.0525	423.0	1.897	45
50	0.0643	428.7	1.928	0.0603	428.3	1.922	0.0568	428.0	1.917	0.0536	427.7	1.911	50
55	0.0655	433.3	1.942	0.0614	433.0	1.936	0.0578	432.7	1.931	0.0546	432.3	1.926	55
60	0.0667	437.9	1.956	0.0626	437.6	1.950	0.0589	437.3	1.945	0.0556	437.0	1.940	60
65	0.0679	442.6	1.970	0.0637	442.3	1.964	0.0600	442.0	1.959	0.0566	441.7	1.954	65
70	0.0690	447.3	1.984	0.0648	447.0	1.978	0.0610	446.7	1.973	0.0577	446.4	1.968	70
75	0.0702	452.0	1.997	0.0659	451.7	1.992	0.0621	451.5	1.986	0.0587	451.2	1.981	75
80	0.0714	456.8	2.011	0.0670	456.5	2.005	0.0631	456.2	2.000	0.0596	456.0	1.995	80
85	0.0725	461.5	2.024	0.0681	461.3	2.019	0.0642	461.0	2.014	0.0606	460.8	2.009	85
90	0.0737	466.4	2.038	0.0692	466.1	2.032	0.0652	465.9	2.027	0.0616	465.6	2.022	90
95	0.0748	471.2	2.051	0.0702	471.0	2.046	0.0662	470.7	2.040	0.0626	470.5	2.035	95
100	0.0759	476.1	2.064	0.0713	475.9	2.059	0.0672	475.6	2.053	0.0636	475.4	2.049	100
105	0.0771	481.0	2.077	0.0724	480.8	2.072	0.0682	480.6	2.067	0.0645	480.4	2.062	105
110	0.0782	485.9	2.090	0.0735	485.7	2.085	0.0693	485.5	2.080	0.0655	485.3	2.075	110
115	0.0793	490.9	2.103	0.0745	490.7	2.098	0.0703	490.5	2.093	0.0665	490.3	2.088	115
120	0.0804	495.9	2.116	0.0756	495.7	2.111	0.0713	495.6	2.105	0.0674	495.4	2.101	120
125	0.0816	501.0	2.129	0.0766	500.8	2.123	0.0723	500.6	2.118	0.0684	500.4	2.113	125
130	0.0827	506.1	2.141	0.0777	505.9	2.136	0.0733	505.7	2.131	0.0693	505.5	2.126	130
135	0.0838	511.2	2.154	0.0787	511.0	2.149	0.0743	510.8	2.144	0.0703	510.7	2.139	135
140	0.0849	516.3	2.167	0.0798	516.2	2.161	0.0753	516.0	2.156	0.0712	515.8	2.151	140
145	0.0860	521.5	2.179	0.0808	521.3	2.174	0.0763	521.2	2.169	0.0721	521.0	2.164	145

ABSOLUTE PRESSURE, kPa

Temp °C	500 kPa (Temp 3.37 C)			525 kPa (4.82 C)			550 kPa (6.22 C)			575 kPa (7.57 C)			Temp °C
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0407	**384.1**	**1.762**	**0.0388**	**384.9**	**1.761**	**0.0371**	**385.6**	**1.760**	**0.0355**	**386.3**	**1.759**	
5	0.0411	385.7	1.767	0.0389	385.0	1.761	-	-	-	-	-	-	5
10	0.0423	390.3	1.784	0.0400	389.8	1.778	0.0379	389.2	1.773	0.0360	388.6	1.767	10
15	0.0434	395.0	1.800	0.0411	394.5	1.795	0.0390	393.9	1.789	0.0370	393.4	1.784	15
20	0.0445	399.6	1.816	0.0421	399.1	1.811	0.0400	398.6	1.806	0.0380	398.1	1.801	20
25	0.0456	404.2	1.832	0.0432	403.8	1.826	0.0410	403.3	1.821	0.0390	402.8	1.816	25
30	0.0466	408.8	1.847	0.0442	408.4	1.842	0.0420	408.0	1.837	0.0400	407.5	1.832	30
35	0.0477	413.4	1.862	0.0452	413.0	1.857	0.0429	412.6	1.852	0.0409	412.2	1.847	35
40	0.0487	418.1	1.877	0.0462	417.7	1.872	0.0439	417.3	1.867	0.0418	416.9	1.862	40
45	0.0497	422.7	1.892	0.0472	422.3	1.887	0.0448	422.0	1.882	0.0427	421.6	1.877	45
50	0.0507	427.3	1.906	0.0481	427.0	1.901	0.0458	426.7	1.897	0.0436	426.3	1.892	50
55	0.0517	432.0	1.920	0.0491	431.7	1.916	0.0467	431.4	1.911	0.0445	431.0	1.907	55
60	0.0527	436.7	1.935	0.0500	436.4	1.930	0.0476	436.1	1.925	0.0454	435.8	1.921	60
65	0.0537	441.4	1.949	0.0509	441.1	1.944	0.0485	440.8	1.939	0.0462	440.5	1.935	65
70	0.0546	446.2	1.963	0.0519	445.9	1.958	0.0494	445.6	1.953	0.0471	445.3	1.949	70
75	0.0556	450.9	1.976	0.0528	450.7	1.972	0.0503	450.4	1.967	0.0479	450.1	1.963	75
80	0.0565	455.7	1.990	0.0537	455.5	1.986	0.0511	455.2	1.981	0.0488	455.0	1.977	80
85	0.0575	460.6	2.004	0.0546	460.3	1.999	0.0520	460.1	1.995	0.0496	459.8	1.990	85
90	0.0584	465.4	2.017	0.0555	465.2	2.013	0.0529	464.9	2.008	0.0504	464.7	2.004	90
95	0.0593	470.3	2.031	0.0564	470.1	2.026	0.0537	469.8	2.022	0.0513	469.6	2.017	95
100	0.0603	475.2	2.044	0.0573	475.0	2.039	0.0546	474.8	2.035	0.0521	474.5	2.031	100
105	0.0612	480.2	2.057	0.0582	479.9	2.052	0.0554	479.7	2.048	0.0529	479.5	2.044	105
110	0.0621	485.1	2.070	0.0590	484.9	2.066	0.0563	484.7	2.061	0.0537	484.5	2.057	110
115	0.0630	490.1	2.083	0.0599	489.9	2.079	0.0571	489.7	2.074	0.0545	489.5	2.070	115
120	0.0639	495.2	2.096	0.0608	495.0	2.091	0.0579	494.8	2.087	0.0553	494.6	2.083	120
125	0.0648	500.2	2.109	0.0617	500.1	2.104	0.0588	499.9	2.100	0.0561	499.7	2.096	125
130	0.0658	505.4	2.121	0.0625	505.2	2.117	0.0596	505.0	2.113	0.0569	504.8	2.109	130
135	0.0667	510.5	2.134	0.0634	510.3	2.130	0.0604	510.1	2.126	0.0577	510.0	2.121	135
140	0.0676	515.7	2.147	0.0643	515.5	2.142	0.0612	515.3	2.138	0.0585	515.2	2.134	140
145	0.0685	520.9	2.159	0.0651	520.7	2.155	0.0621	520.5	2.151	0.0593	520.4	2.147	145
150	0.0693	526.1	2.172	0.0660	525.9	2.167	0.0629	525.8	2.163	0.0601	525.6	2.159	150

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	600 kPa			625 kPa			650 kPa			675 kPa			Temp °C
	Temp 8.38 °C			10.15 °C			11.38 °C			12.58 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0340	386.9	1.758	0.0326	387.6	1.758	0.0314	388.2	1.757	0.0302	388.7	1.756	
10	0.0342	388.0	1.762	-	-	-	-	-	-	-	-	-	10
15	0.0352	392.8	1.779	0.0336	392.3	1.774	0.0321	391.7	1.769	0.0307	391.1	1.765	15
20	0.0362	397.6	1.796	0.0345	397.1	1.791	0.0330	396.6	1.786	0.0316	396.1	1.782	20
25	0.0372	402.4	1.812	0.0355	401.9	1.807	0.0339	401.4	1.803	0.0325	400.9	1.798	25
30	0.0381	407.1	1.827	0.0364	406.6	1.823	0.0348	406.2	1.818	0.0333	405.7	1.814	30
35	0.0390	411.8	1.843	0.0373	411.4	1.838	0.0357	411.0	1.834	0.0342	410.5	1.830	35
40	0.0399	416.5	1.858	0.0381	416.1	1.854	0.0365	415.7	1.849	0.0350	415.3	1.845	40
45	0.0408	421.2	1.873	0.0390	420.9	1.869	0.0373	420.5	1.864	0.0358	420.1	1.860	45
50	0.0416	426.0	1.888	0.0398	425.6	1.883	0.0381	425.3	1.879	0.0366	424.9	1.875	50
55	0.0425	430.7	1.902	0.0406	430.4	1.898	0.0389	430.0	1.894	0.0374	429.7	1.890	55
60	0.0433	435.5	1.917	0.0415	435.1	1.913	0.0397	434.8	1.909	0.0381	434.5	1.905	60
65	0.0442	440.2	1.931	0.0423	439.9	1.927	0.0405	439.6	1.923	0.0389	439.3	1.919	65
70	0.0450	445.0	1.945	0.0431	444.7	1.941	0.0413	444.5	1.937	0.0396	444.2	1.933	70
75	0.0458	449.8	1.959	0.0439	449.6	1.955	0.0421	449.3	1.951	0.0404	449.0	1.947	75
80	0.0466	454.7	1.973	0.0446	454.4	1.969	0.0428	454.2	1.965	0.0411	453.9	1.961	80
85	0.0474	459.6	1.986	0.0454	459.3	1.982	0.0436	459.1	1.979	0.0419	458.8	1.975	85
90	0.0482	464.5	2.000	0.0462	464.2	1.996	0.0443	464.0	1.992	0.0426	463.7	1.989	90
95	0.0490	469.4	2.013	0.0470	469.1	2.009	0.0451	468.9	2.006	0.0433	468.7	2.002	95
100	0.0498	474.3	2.027	0.0477	474.1	2.023	0.0458	473.9	2.019	0.0440	473.6	2.016	100
105	0.0506	479.3	2.040	0.0485	479.1	2.036	0.0465	478.9	2.032	0.0447	478.6	2.029	105
110	0.0514	484.3	2.053	0.0492	484.1	2.049	0.0473	483.9	2.046	0.0454	483.7	2.042	110
115	0.0522	489.3	2.066	0.0500	489.1	2.062	0.0480	488.9	2.059	0.0461	488.7	2.055	115
120	0.0529	494.4	2.079	0.0507	494.2	2.075	0.0487	494.0	2.072	0.0468	493.8	2.068	120
125	0.0537	499.5	2.092	0.0515	499.3	2.088	0.0494	499.1	2.085	0.0475	498.9	2.081	125
130	0.0545	504.6	2.105	0.0522	504.5	2.101	0.0501	504.3	2.097	0.0482	504.1	2.094	130
135	0.0552	509.8	2.118	0.0530	509.6	2.114	0.0508	509.4	2.110	0.0489	509.3	2.107	135
140	0.0560	515.0	2.130	0.0537	514.8	2.126	0.0515	514.6	2.123	0.0496	514.5	2.119	140
145	0.0568	520.2	2.143	0.0544	520.0	2.139	0.0523	519.9	2.135	0.0503	519.7	2.132	145
150	0.0575	525.5	2.155	0.0551	525.3	2.152	0.0530	525.1	2.148	0.0509	525.0	2.145	150
155	0.0583	530.7	2.168	0.0559	530.6	2.164	0.0537	530.4	2.160	0.0516	530.3	2.157	155

ABSOLUTE PRESSURE, kPa

Temp °C	700 kPa			725 kPa			750 kPa			775 kPa			Temp °C
	Temp 13.74 C			14.87 C			15.97 C			17.05 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0291	389.3	1.756	0.0281	389.8	1.755	0.0271	390.3	1.754	0.0263	390.8	1.754	
15	0.0293	390.6	1.760	0.0281	390.0	1.756	-	-	-	-	-	-	15
20	0.0302	395.5	1.777	0.0290	395.0	1.773	0.0278	394.4	1.769	0.0268	393.9	1.764	20
25	0.0311	400.4	1.794	0.0299	399.9	1.790	0.0287	399.4	1.785	0.0276	398.9	1.781	25
30	0.0320	405.3	1.810	0.0307	404.8	1.806	0.0295	404.4	1.802	0.0284	403.9	1.798	30
35	0.0328	410.1	1.826	0.0315	409.7	1.822	0.0303	409.2	1.818	0.0292	408.8	1.814	35
40	0.0336	414.9	1.841	0.0323	414.5	1.837	0.0311	414.1	1.833	0.0299	413.7	1.830	40
45	0.0344	419.7	1.856	0.0330	419.4	1.853	0.0318	419.0	1.849	0.0306	418.6	1.845	45
50	0.0351	424.6	1.871	0.0338	424.2	1.868	0.0325	423.8	1.864	0.0314	423.5	1.860	50
55	0.0359	429.4	1.886	0.0345	429.0	1.883	0.0333	428.7	1.879	0.0321	428.3	1.875	55
60	0.0367	434.2	1.901	0.0353	433.9	1.897	0.0340	433.5	1.894	0.0328	433.2	1.890	60
65	0.0374	439.0	1.915	0.0360	438.7	1.912	0.0347	438.4	1.908	0.0334	438.1	1.905	65
70	0.0381	443.9	1.930	0.0367	443.6	1.926	0.0354	443.3	1.922	0.0341	443.0	1.919	70
75	0.0388	448.7	1.944	0.0374	448.5	1.940	0.0360	448.2	1.937	0.0348	447.9	1.933	75
80	0.0396	453.6	1.958	0.0381	453.4	1.954	0.0367	453.1	1.951	0.0354	452.8	1.947	80
85	0.0403	458.5	1.971	0.0388	458.3	1.968	0.0374	458.0	1.964	0.0361	457.8	1.961	85
90	0.0410	463.5	1.985	0.0395	463.2	1.982	0.0381	463.0	1.978	0.0367	462.7	1.975	90
95	0.0417	468.4	1.999	0.0401	468.2	1.995	0.0387	468.0	1.992	0.0374	467.7	1.989	95
100	0.0424	473.4	2.012	0.0408	473.2	2.009	0.0394	473.0	2.005	0.0380	472.7	2.002	100
105	0.0430	478.4	2.025	0.0415	478.2	2.022	0.0400	478.0	2.019	0.0386	477.8	2.016	105
110	0.0437	483.5	2.039	0.0421	483.3	2.035	0.0407	483.0	2.032	0.0393	482.8	2.029	110
115	0.0444	488.5	2.052	0.0428	488.3	2.048	0.0413	488.1	2.045	0.0399	487.9	2.042	115
120	0.0451	493.6	2.065	0.0434	493.4	2.061	0.0419	493.2	2.058	0.0405	493.0	2.055	120
125	0.0457	498.8	2.078	0.0441	498.6	2.074	0.0426	498.4	2.071	0.0411	498.2	2.068	125
130	0.0464	503.9	2.091	0.0447	503.7	2.087	0.0432	503.5	2.084	0.0417	503.4	2.081	130
135	0.0471	509.1	2.103	0.0454	508.9	2.100	0.0438	508.7	2.097	0.0423	508.6	2.094	135
140	0.0477	514.3	2.116	0.0460	514.1	2.113	0.0444	514.0	2.110	0.0429	513.8	2.107	140
145	0.0484	519.5	2.129	0.0467	519.4	2.125	0.0451	519.2	2.122	0.0435	519.0	2.119	145
150	0.0491	524.8	2.141	0.0473	524.7	2.138	0.0457	524.5	2.135	0.0441	524.3	2.132	150
155	0.0497	530.1	2.154	0.0479	530.0	2.150	0.0463	529.8	2.147	0.0447	529.7	2.144	155
160	0.0504	535.5	2.166	0.0486	535.3	2.163	0.0469	535.2	2.160	0.0453	535.0	2.157	160

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg H = Enthalpy in kJ/kg S = Entropy in kJ/kg.K Saturation Properties in Light Green

ABSOLUTE PRESSURE, kPa

Temp °C	800 kPa			850 kPa			900 kPa			950 kPa			Temp °C
	18.10 °C			20.12 °C			22.06 °C			23.92 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0254	391.3	1.753	0.0239	392.2	1.752	0.0225	393.1	1.751	0.0213	393.9	1.750	
20	0.0257	393.3	1.760	-	-	-	-	-	-	-	-	-	20
25	0.0266	398.4	1.777	0.0247	397.3	1.769	0.0230	396.2	1.762	0.0214	395.1	1.754	25
30	0.0273	403.4	1.794	0.0254	402.4	1.786	0.0237	401.4	1.779	0.0222	400.4	1.772	30
35	0.0281	408.4	1.810	0.0262	407.4	1.803	0.0244	406.5	1.796	0.0229	405.6	1.789	35
40	0.0288	413.3	1.826	0.0269	412.4	1.819	0.0251	411.6	1.812	0.0236	410.7	1.805	40
45	0.0296	418.2	1.842	0.0276	417.4	1.835	0.0258	416.6	1.828	0.0242	415.8	1.821	45
50	0.0303	423.1	1.857	0.0282	422.3	1.850	0.0264	421.6	1.843	0.0248	420.8	1.837	50
55	0.0309	428.0	1.872	0.0289	427.3	1.865	0.0271	426.6	1.859	0.0255	425.8	1.853	55
60	0.0316	432.9	1.887	0.0296	432.2	1.880	0.0277	431.5	1.874	0.0261	430.9	1.868	60
65	0.0323	437.8	1.901	0.0302	437.2	1.895	0.0283	436.5	1.889	0.0267	435.9	1.883	65
70	0.0330	442.7	1.916	0.0308	442.1	1.909	0.0289	441.5	1.903	0.0272	440.9	1.897	70
75	0.0336	447.6	1.930	0.0314	447.0	1.924	0.0295	446.5	1.918	0.0278	445.9	1.912	75
80	0.0342	452.6	1.944	0.0321	452.0	1.938	0.0301	451.5	1.932	0.0284	450.9	1.926	80
85	0.0349	457.5	1.958	0.0327	457.0	1.952	0.0307	456.5	1.946	0.0289	455.9	1.940	85
90	0.0355	462.5	1.972	0.0333	462.0	1.966	0.0313	461.5	1.960	0.0295	461.0	1.954	90
95	0.0361	467.5	1.985	0.0339	467.0	1.979	0.0318	466.5	1.974	0.0300	466.0	1.968	95
100	0.0368	472.5	1.999	0.0344	472.0	1.993	0.0324	471.6	1.987	0.0306	471.1	1.982	100
105	0.0374	477.6	2.012	0.0350	477.1	2.007	0.0329	476.7	2.001	0.0311	476.2	1.995	105
110	0.0380	482.6	2.026	0.0356	482.2	2.020	0.0335	481.8	2.014	0.0316	481.3	2.009	110
115	0.0386	487.7	2.039	0.0362	487.3	2.033	0.0340	486.9	2.028	0.0321	486.5	2.022	115
120	0.0392	492.8	2.052	0.0367	492.4	2.046	0.0346	492.1	2.041	0.0327	491.7	2.035	120
125	0.0398	498.0	2.065	0.0373	497.6	2.059	0.0351	497.2	2.054	0.0332	496.8	2.049	125
130	0.0404	503.2	2.078	0.0379	502.8	2.072	0.0357	502.4	2.067	0.0337	502.1	2.062	130
135	0.0410	508.4	2.091	0.0384	508.0	2.085	0.0362	507.7	2.080	0.0342	507.3	2.075	135
140	0.0415	513.6	2.104	0.0390	513.3	2.098	0.0367	512.9	2.093	0.0347	512.6	2.087	140
145	0.0421	518.9	2.116	0.0395	518.5	2.111	0.0373	518.2	2.105	0.0352	517.9	2.100	145
150	0.0427	524.2	2.129	0.0401	523.9	2.123	0.0378	523.5	2.118	0.0357	523.2	2.113	150
155	0.0433	529.5	2.141	0.0406	529.2	2.136	0.0383	528.9	2.130	0.0362	528.6	2.125	155
160	0.0439	534.9	2.154	0.0412	534.6	2.148	0.0388	534.2	2.143	0.0367	533.9	2.138	160
165	0.0444	540.2	2.166	0.0417	539.9	2.161	0.0393	539.6	2.155	0.0372	539.3	2.150	165

ABSOLUTE PRESSURE, kPa

Temp °C	1000 kPa			1100 kPa			1200 kPa			1300 kPa			Temp °C
	25.70 C			29.08 C			32.23 C			35.19 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0202	394.6	1.749	0.0182	396.0	1.747	0.0166	397.2	1.746	0.0152	398.2	1.744	
30	0.0208	399.3	1.765	0.0184	397.0	1.751	-	-	-	-	-	-	30
35	0.0215	404.6	1.782	0.0190	402.5	1.769	0.0170	400.3	1.756	-	-	-	35
40	0.0221	409.8	1.799	0.0197	407.9	1.786	0.0176	405.9	1.774	0.0158	403.8	1.762	40
45	0.0228	414.9	1.815	0.0203	413.2	1.803	0.0182	411.4	1.791	0.0164	409.5	1.780	45
50	0.0234	420.0	1.831	0.0209	418.4	1.819	0.0188	416.7	1.808	0.0170	415.0	1.797	50
55	0.0240	425.1	1.847	0.0214	423.6	1.835	0.0193	422.0	1.824	0.0175	420.4	1.814	55
60	0.0246	430.2	1.862	0.0220	428.7	1.851	0.0198	427.3	1.840	0.0180	425.8	1.830	60
65	0.0251	435.2	1.877	0.0225	433.9	1.866	0.0203	432.5	1.856	0.0185	431.1	1.846	65
70	0.0257	440.3	1.892	0.0231	439.0	1.881	0.0208	437.7	1.871	0.0190	436.4	1.861	70
75	0.0263	445.3	1.906	0.0236	444.1	1.896	0.0213	442.9	1.886	0.0194	441.6	1.876	75
80	0.0268	450.3	1.921	0.0241	449.2	1.910	0.0218	448.0	1.900	0.0199	446.9	1.891	80
85	0.0273	455.4	1.935	0.0246	454.3	1.925	0.0223	453.2	1.915	0.0203	452.1	1.906	85
90	0.0279	460.5	1.949	0.0251	459.4	1.939	0.0228	458.4	1.929	0.0208	457.3	1.920	90
95	0.0284	465.6	1.963	0.0256	464.6	1.953	0.0232	463.6	1.943	0.0212	462.5	1.935	95
100	0.0289	470.7	1.977	0.0260	469.7	1.967	0.0237	468.7	1.957	0.0216	467.8	1.949	100
105	0.0294	475.8	1.990	0.0265	474.9	1.980	0.0241	473.9	1.971	0.0221	473.0	1.963	105
110	0.0299	480.9	2.004	0.0270	480.0	1.994	0.0245	479.1	1.985	0.0225	478.3	1.977	110
115	0.0304	486.1	2.017	0.0275	485.2	2.008	0.0250	484.4	1.999	0.0229	483.5	1.990	115
120	0.0309	491.3	2.030	0.0279	490.4	2.021	0.0254	489.6	2.012	0.0233	488.8	2.004	120
125	0.0314	496.5	2.044	0.0284	495.7	2.034	0.0258	494.9	2.025	0.0237	494.1	2.017	125
130	0.0319	501.7	2.057	0.0288	500.9	2.047	0.0263	500.2	2.039	0.0241	499.4	2.030	130
135	0.0324	506.9	2.070	0.0293	506.2	2.060	0.0267	505.5	2.052	0.0245	504.7	2.044	135
140	0.0329	512.2	2.082	0.0297	511.5	2.073	0.0271	510.8	2.065	0.0249	510.1	2.057	140
145	0.0334	517.5	2.095	0.0302	516.9	2.086	0.0275	516.2	2.077	0.0252	515.5	2.070	145
150	0.0338	522.9	2.108	0.0306	522.2	2.099	0.0279	521.6	2.090	0.0256	520.9	2.082	150
155	0.0343	528.2	2.120	0.0310	527.6	2.111	0.0283	527.0	2.103	0.0260	526.3	2.095	155
160	0.0348	533.6	2.133	0.0315	533.0	2.124	0.0287	532.4	2.116	0.0264	531.8	2.108	160
165	0.0353	539.1	2.145	0.0319	538.5	2.136	0.0291	537.9	2.128	0.0268	537.2	2.120	165
170	0.0357	544.5	2.158	0.0323	543.9	2.149	0.0295	543.3	2.141	0.0271	542.7	2.133	170
175	0.0362	550.0	2.170	0.0328	549.4	2.161	0.0299	548.8	2.153	0.0275	548.3	2.145	175

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg H = Enthalpy in kJ/kg S = Entropy in kJ/kg.K Saturation Properties in Light Green

ABSOLUTE PRESSURE, kPa

Temp °C	1400 kPa			1500 kPa			1600 kPa			1700 kPa			Temp °C
	Temp 37.98 °C			40.63 °C			43.14 °C			45.54 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0140	399.1	1.742	0.0130	399.9	1.740	0.0121	400.6	1.738	0.0113	401.2	1.737	
40	0.0143	401.6	1.750	-	-	-	-	-	-	-	-	-	40
45	0.0149	407.4	1.768	0.0135	405.3	1.757	0.0123	403.0	1.746	-	-	-	45
50	0.0154	413.1	1.786	0.0140	411.2	1.776	0.0128	409.2	1.765	0.0118	407.0	1.755	50
55	0.0159	418.7	1.803	0.0146	417.0	1.793	0.0133	415.1	1.783	0.0123	413.2	1.774	55
60	0.0164	424.2	1.820	0.0150	422.6	1.810	0.0138	420.9	1.801	0.0127	419.1	1.792	60
65	0.0169	429.6	1.836	0.0155	428.1	1.827	0.0143	426.6	1.818	0.0132	424.9	1.809	65
70	0.0174	435.0	1.852	0.0160	433.6	1.843	0.0147	432.1	1.834	0.0136	430.6	1.826	70
75	0.0178	440.3	1.867	0.0164	439.0	1.859	0.0151	437.7	1.850	0.0140	436.3	1.842	75
80	0.0182	445.6	1.882	0.0168	444.4	1.874	0.0155	443.1	1.866	0.0144	441.8	1.858	80
85	0.0187	450.9	1.897	0.0172	449.8	1.889	0.0159	448.6	1.881	0.0148	447.3	1.873	85
90	0.0191	456.2	1.912	0.0176	455.1	1.904	0.0163	454.0	1.896	0.0152	452.8	1.888	90
95	0.0195	461.5	1.926	0.0180	460.4	1.918	0.0167	459.4	1.911	0.0156	458.3	1.903	95
100	0.0199	466.8	1.941	0.0184	465.8	1.933	0.0171	464.7	1.925	0.0159	463.7	1.918	100
105	0.0203	472.1	1.955	0.0188	471.1	1.947	0.0174	470.1	1.940	0.0163	469.1	1.933	105
110	0.0207	477.3	1.969	0.0192	476.4	1.961	0.0178	475.5	1.954	0.0166	474.6	1.947	110
115	0.0211	482.6	1.982	0.0195	481.8	1.975	0.0182	480.9	1.968	0.0169	480.0	1.961	115
120	0.0215	488.0	1.996	0.0199	487.1	1.988	0.0185	486.3	1.981	0.0173	485.4	1.975	120
125	0.0218	493.3	2.009	0.0202	492.5	2.002	0.0188	491.7	1.995	0.0176	490.8	1.988	125
130	0.0222	498.6	2.023	0.0206	497.9	2.015	0.0192	497.1	2.009	0.0179	496.3	2.002	130
135	0.0226	504.0	2.036	0.0209	503.3	2.029	0.0195	502.5	2.022	0.0183	501.7	2.015	135
140	0.0230	509.4	2.049	0.0213	508.7	2.042	0.0198	507.9	2.035	0.0186	507.2	2.029	140
145	0.0233	514.8	2.062	0.0216	514.1	2.055	0.0202	513.4	2.048	0.0189	512.7	2.042	145
150	0.0237	520.2	2.075	0.0220	519.5	2.068	0.0205	518.9	2.061	0.0192	518.2	2.055	150
155	0.0240	525.7	2.088	0.0223	525.0	2.081	0.0208	524.4	2.074	0.0195	523.7	2.068	155
160	0.0244	531.1	2.100	0.0227	530.5	2.094	0.0211	529.9	2.087	0.0198	529.2	2.081	160
165	0.0247	536.6	2.113	0.0230	536.0	2.106	0.0215	535.4	2.100	0.0201	534.8	2.094	165
170	0.0251	542.2	2.126	0.0233	541.6	2.119	0.0218	541.0	2.112	0.0204	540.4	2.106	170
175	0.0254	547.7	2.138	0.0237	547.1	2.131	0.0221	546.6	2.125	0.0207	546.0	2.119	175
180	0.0258	553.3	2.150	0.0240	552.7	2.144	0.0224	552.2	2.137	0.0210	551.6	2.131	180
185	0.0261	558.9	2.163	0.0243	558.3	2.156	0.0227	557.8	2.150	0.0213	557.2	2.144	185

ABSOLUTE PRESSURE, kPa

Temp °C	1800 kPa			1900 kPa			2000 kPa			2200 kPa			Temp °C
	Temp 47.83 C			50.02 C			52.13 C			56.11 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0105	401.7	1.735	0.0099	402.1	1.733	0.0093	402.4	1.731	0.0082	402.8	1.727	
50	0.0108	404.6	1.744	-	-	-	-	-	-	-	-	-	50
55	0.0113	411.1	1.764	0.0104	408.9	1.754	0.0096	406.5	1.743	-	-	-	55
60	0.0118	417.3	1.782	0.0109	415.3	1.773	0.0101	413.2	1.764	0.0086	408.7	1.744	60
65	0.0122	423.3	1.800	0.0113	421.5	1.792	0.0105	419.6	1.783	0.0091	415.6	1.765	65
70	0.0126	429.1	1.817	0.0118	427.5	1.809	0.0110	425.8	1.801	0.0096	422.2	1.785	70
75	0.0130	434.8	1.834	0.0122	433.3	1.826	0.0114	431.8	1.818	0.0099	428.6	1.803	75
80	0.0134	440.5	1.850	0.0125	439.1	1.842	0.0117	437.7	1.835	0.0103	434.7	1.820	80
85	0.0138	446.1	1.866	0.0129	444.8	1.858	0.0121	443.5	1.851	0.0107	440.7	1.837	85
90	0.0142	451.6	1.881	0.0133	450.4	1.874	0.0124	449.2	1.867	0.0110	446.6	1.854	90
95	0.0145	457.1	1.896	0.0136	456.0	1.889	0.0128	454.9	1.883	0.0113	452.5	1.870	95
100	0.0149	462.6	1.911	0.0139	461.6	1.904	0.0131	460.5	1.898	0.0117	458.2	1.885	100
105	0.0152	468.1	1.926	0.0143	467.1	1.919	0.0134	466.1	1.913	0.0120	463.9	1.900	105
110	0.0155	473.6	1.940	0.0146	472.6	1.934	0.0137	471.6	1.927	0.0123	469.6	1.915	110
115	0.0159	479.1	1.954	0.0149	478.1	1.948	0.0140	477.2	1.942	0.0125	475.3	1.930	115
120	0.0162	484.5	1.968	0.0152	483.6	1.962	0.0143	482.7	1.956	0.0128	480.9	1.944	120
125	0.0165	490.0	1.982	0.0155	489.1	1.976	0.0146	488.3	1.970	0.0131	486.6	1.959	125
130	0.0168	495.5	1.996	0.0158	494.7	1.990	0.0149	493.8	1.984	0.0134	492.2	1.973	130
135	0.0171	501.0	2.009	0.0161	500.2	2.003	0.0152	499.4	1.997	0.0136	497.8	1.987	135
140	0.0174	506.5	2.023	0.0164	505.7	2.017	0.0155	504.9	2.011	0.0139	503.4	2.000	140
145	0.0177	512.0	2.036	0.0167	511.2	2.030	0.0158	510.5	2.024	0.0142	509.0	2.014	145
150	0.0180	517.5	2.049	0.0170	516.8	2.043	0.0160	516.1	2.038	0.0144	514.7	2.027	150
155	0.0183	523.0	2.062	0.0173	522.4	2.056	0.0163	521.7	2.051	0.0147	520.3	2.040	155
160	0.0186	528.6	2.075	0.0175	527.9	2.069	0.0166	527.3	2.064	0.0149	526.0	2.054	160
165	0.0189	534.2	2.088	0.0178	533.5	2.082	0.0169	532.9	2.077	0.0152	531.6	2.067	165
170	0.0192	539.8	2.100	0.0181	539.2	2.095	0.0171	538.6	2.090	0.0154	537.3	2.079	170
175	0.0195	545.4	2.113	0.0184	544.8	2.108	0.0174	544.2	2.102	0.0157	543.0	2.092	175
180	0.0198	551.0	2.126	0.0186	550.5	2.120	0.0176	549.9	2.115	0.0159	548.7	2.105	180
185	0.0200	556.7	2.138	0.0189	556.1	2.133	0.0179	555.6	2.127	0.0161	554.5	2.117	185
190	0.0203	562.4	2.150	0.0192	561.8	2.145	0.0181	561.3	2.140	0.0164	560.2	2.130	190
195	0.0206	568.1	2.163	0.0194	567.6	2.157	0.0184	567.0	2.152	0.0166	566.0	2.142	195

DuPont™ ISCEON® MO99™
Superheated Vapor - Constant Pressure Tables

V = Volume in m^3/kg **H = Enthalpy in kJ/kg** **S = Entropy in kJ/kg.K** **Saturation Properties in Light Green**

ABSOLUTE PRESSURE, kPa

Temp °C	2400			2600			2800			3000			Temp °C
	59.81 °C			63.27 °C			66.52 °C			69.58 °C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0074	402.8	1.722	0.0066	402.6	1.717	0.0059	402.0	1.712	0.0053	401.0	1.705	
60	0.0074	403.2	1.723	-	-	-	-	-	-	-	-	-	60
65	0.0079	411.1	1.747	0.0068	405.7	1.726	-	-	-	-	-	-	65
70	0.0083	418.3	1.768	0.0073	413.8	1.750	0.0063	408.6	1.731	0.0054	401.9	1.708	70
75	0.0088	425.1	1.787	0.0077	421.2	1.772	0.0068	416.9	1.755	0.0059	411.8	1.737	75
80	0.0091	431.6	1.806	0.0081	428.1	1.791	0.0072	424.4	1.776	0.0064	420.2	1.761	80
85	0.0095	437.8	1.824	0.0085	434.7	1.810	0.0076	431.4	1.796	0.0068	427.8	1.782	85
90	0.0098	444.0	1.841	0.0088	441.1	1.828	0.0079	438.1	1.815	0.0071	434.9	1.802	90
95	0.0101	450.0	1.857	0.0091	447.3	1.845	0.0082	444.6	1.832	0.0074	441.7	1.820	95
100	0.0104	455.9	1.873	0.0094	453.4	1.861	0.0085	450.9	1.850	0.0077	448.2	1.838	100
105	0.0107	461.7	1.889	0.0097	459.5	1.877	0.0088	457.1	1.866	0.0080	454.6	1.855	105
110	0.0110	467.5	1.904	0.0100	465.4	1.893	0.0091	463.2	1.882	0.0083	460.9	1.871	110
115	0.0113	473.3	1.919	0.0102	471.3	1.908	0.0093	469.2	1.898	0.0085	467.0	1.887	115
120	0.0116	479.1	1.933	0.0105	477.1	1.923	0.0096	475.2	1.913	0.0088	473.1	1.903	120
125	0.0118	484.8	1.948	0.0107	482.9	1.938	0.0098	481.1	1.928	0.0090	479.2	1.918	125
130	0.0121	490.5	1.962	0.0110	488.7	1.952	0.0100	487.0	1.943	0.0092	485.2	1.933	130
135	0.0123	496.2	1.976	0.0112	494.5	1.966	0.0103	492.8	1.957	0.0095	491.1	1.948	135
140	0.0126	501.9	1.990	0.0115	500.3	1.980	0.0105	498.7	1.971	0.0097	497.0	1.962	140
145	0.0128	507.5	2.004	0.0117	506.0	1.994	0.0107	504.5	1.985	0.0099	502.9	1.977	145
150	0.0131	513.2	2.017	0.0119	511.8	2.008	0.0110	510.3	1.999	0.0101	508.8	1.990	150
155	0.0133	518.9	2.031	0.0122	517.5	2.021	0.0112	516.1	2.013	0.0103	514.7	2.004	155
160	0.0136	524.6	2.044	0.0124	523.3	2.035	0.0114	521.9	2.026	0.0105	520.5	2.018	160
165	0.0138	530.4	2.057	0.0126	529.1	2.048	0.0116	527.7	2.040	0.0107	526.4	2.031	165
170	0.0140	536.1	2.070	0.0128	534.8	2.061	0.0118	533.6	2.053	0.0109	532.3	2.045	170
175	0.0142	541.8	2.083	0.0130	540.6	2.074	0.0120	539.4	2.066	0.0111	538.2	2.058	175
180	0.0145	547.6	2.096	0.0132	546.4	2.087	0.0122	545.2	2.079	0.0113	544.0	2.071	180
185	0.0147	553.4	2.108	0.0135	552.2	2.100	0.0124	551.1	2.092	0.0115	549.9	2.084	185
190	0.0149	559.1	2.121	0.0137	558.0	2.112	0.0126	556.9	2.104	0.0117	555.8	2.097	190
195	0.0151	564.9	2.133	0.0139	563.9	2.125	0.0128	562.8	2.117	0.0119	561.7	2.109	195
200	0.0153	570.8	2.146	0.0141	569.7	2.137	0.0130	568.7	2.129	0.0120	567.7	2.122	200
205	0.0156	576.6	2.158	0.0143	575.6	2.150	0.0132	574.6	2.142	0.0122	573.6	2.134	205

ABSOLUTE PRESSURE, kPa

Temp °C	3200			3400			3600			3800			Temp °C
	72.46 C			75.19 C			77.75 C			80.15 C			
	V	H	S	V	H	S	V	H	S	V	H	S	
	0.0048	399.5	1.698	0.0043	397.5	1.690	0.0038	394.7	1.680	0.0034	390.7	1.666	
75	0.0051	405.6	1.716	-	-	-	-	-	-	-	-	-	75
80	0.0056	415.4	1.744	0.0049	409.6	1.724	0.0042	402.2	1.701	-	-	-	80
85	0.0060	423.7	1.767	0.0054	419.2	1.751	0.0047	414.0	1.734	0.0041	407.6	1.714	85
90	0.0064	431.4	1.788	0.0058	427.6	1.775	0.0052	423.3	1.760	0.0046	418.6	1.744	90
95	0.0067	438.5	1.808	0.0061	435.2	1.795	0.0055	431.6	1.783	0.0050	427.7	1.769	95
100	0.0070	445.4	1.826	0.0064	442.4	1.815	0.0058	439.2	1.803	0.0053	435.9	1.791	100
105	0.0073	452.0	1.844	0.0067	449.3	1.833	0.0061	446.5	1.822	0.0056	443.5	1.811	105
110	0.0076	458.5	1.861	0.0069	456.0	1.851	0.0064	453.4	1.841	0.0059	450.7	1.830	110
115	0.0078	464.8	1.878	0.0072	462.5	1.868	0.0066	460.1	1.858	0.0061	457.6	1.848	115
120	0.0081	471.0	1.893	0.0074	468.9	1.884	0.0069	466.7	1.875	0.0064	464.4	1.866	120
125	0.0083	477.2	1.909	0.0077	475.2	1.900	0.0071	473.1	1.891	0.0066	471.0	1.882	125
130	0.0085	483.3	1.924	0.0079	481.4	1.915	0.0073	479.4	1.907	0.0068	477.4	1.898	130
135	0.0087	489.3	1.939	0.0081	487.5	1.931	0.0075	485.7	1.922	0.0070	483.8	1.914	135
140	0.0089	495.3	1.954	0.0083	493.6	1.945	0.0077	491.9	1.937	0.0072	490.1	1.929	140
145	0.0092	501.3	1.968	0.0085	499.7	1.960	0.0079	498.0	1.952	0.0074	496.4	1.944	145
150	0.0094	507.3	1.982	0.0087	505.7	1.974	0.0081	504.2	1.967	0.0076	502.6	1.959	150
155	0.0096	513.2	1.996	0.0089	511.7	1.988	0.0083	510.2	1.981	0.0078	508.7	1.974	155
160	0.0098	519.1	2.010	0.0091	517.7	2.002	0.0085	516.3	1.995	0.0079	514.8	1.988	160
165	0.0099	525.1	2.024	0.0093	523.7	2.016	0.0087	522.3	2.009	0.0081	520.9	2.002	165
170	0.0101	531.0	2.037	0.0094	529.7	2.030	0.0088	528.4	2.023	0.0083	527.0	2.016	170
175	0.0103	536.9	2.050	0.0096	535.7	2.043	0.0090	534.4	2.036	0.0085	533.1	2.029	175
180	0.0105	542.8	2.063	0.0098	541.6	2.056	0.0092	540.4	2.049	0.0086	539.2	2.043	180
185	0.0107	548.8	2.077	0.0100	547.6	2.069	0.0093	546.4	2.063	0.0088	545.2	2.056	185
190	0.0109	554.7	2.089	0.0101	553.6	2.082	0.0095	552.4	2.076	0.0089	551.3	2.069	190
195	0.0110	560.7	2.102	0.0103	559.6	2.095	0.0097	558.5	2.089	0.0091	557.4	2.082	195
200	0.0112	566.6	2.115	0.0105	565.6	2.108	0.0098	564.5	2.101	0.0093	563.4	2.095	200
205	0.0114	572.6	2.127	0.0107	571.6	2.121	0.0100	570.5	2.114	0.0094	569.5	2.108	205
210	0.0116	578.6	2.140	0.0108	577.6	2.133	0.0102	576.6	2.127	0.0096	575.6	2.121	210
215	0.0117	584.6	2.152	0.0110	583.6	2.146	0.0103	582.6	2.139	0.0097	581.7	2.133	215
220	0.0119	590.6	2.164	0.0111	589.7	2.158	0.0105	588.7	2.152	0.0099	587.8	2.146	220

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