



ISCEON 29

Saturated Properties

Standard state of liquid at 0°C, Enthalpy = 200 kJ/kg, Entropy = 1.0 kJ/kg.K. Latent Heat at Bubble Point Pressure

Temp °C	Bubble Pt.	Dew Pt.	Volume (m ³ /kg)		Density (kg/m ³)		Enthalpy (kJ/kg)			Entropy (kJ/kg.K)	
	Pressure Psig	Pressure Psig	Liquid	Vapour	Liquid	Vapour	Liquid	Latent	Vapour	Liquid	Vapour
-50	-3.175	-5.564	0.0007	0.2984	1425	3.4	137.6	191.2	328.8	0.750	1.617
-49	-2.621	-5.093	0.0007	0.2835	1422	3.5	138.8	190.7	329.5	0.755	1.616
-48	-2.047	-4.603	0.0007	0.2695	1419	3.7	140.0	190.1	330.1	0.760	1.615
-47	-1.450	-4.092	0.0007	0.2563	1416	3.9	141.2	189.5	330.7	0.765	1.614
-46	-0.831	-3.561	0.0007	0.2439	1413	4.1	142.4	188.9	331.3	0.771	1.612
-45	-0.189	-3.008	0.0007	0.2322	1409	4.3	143.6	188.4	332.0	0.776	1.611
-44	0.477	-2.434	0.0007	0.2212	1406	4.5	144.8	187.8	332.6	0.781	1.610
-43	1.167	-1.836	0.0007	0.2108	1403	4.7	146.0	187.2	333.2	0.786	1.609
-42	1.882	-1.216	0.0007	0.2010	1400	5.0	147.2	186.6	333.8	0.792	1.608
-41	2.623	-0.571	0.0007	0.1917	1397	5.2	148.4	186.0	334.4	0.797	1.607
-40	3.391	0.098	0.0007	0.1830	1393	5.5	149.6	185.4	335.0	0.802	1.606
-39	4.185	0.792	0.0007	0.1747	1390	5.7	150.8	184.9	335.7	0.807	1.605
-38	5.007	1.513	0.0007	0.1669	1387	6.0	152.0	184.3	336.3	0.812	1.604
-37	5.858	2.260	0.0007	0.1595	1384	6.3	153.2	183.7	336.9	0.817	1.604
-36	6.737	3.034	0.0007	0.1525	1381	6.6	154.4	183.1	337.5	0.823	1.603
-35	7.646	3.837	0.0007	0.1459	1377	6.9	155.7	182.4	338.1	0.828	1.602
-34	8.586	4.669	0.0007	0.1396	1374	7.2	156.9	181.8	338.7	0.833	1.601
-33	9.557	5.530	0.0007	0.1337	1371	7.5	158.1	181.2	339.3	0.838	1.600
-32	10.560	6.421	0.0007	0.1280	1367	7.8	159.3	180.7	340.0	0.843	1.600
-31	11.596	7.344	0.0007	0.1226	1364	8.2	160.6	180.0	340.6	0.848	1.599
-30	12.665	8.298	0.0007	0.1176	1361	8.5	161.8	179.4	341.2	0.853	1.598
-29	13.768	9.285	0.0007	0.1127	1357	8.9	163.0	178.8	341.8	0.858	1.597
-28	14.907	10.306	0.0007	0.1081	1354	9.2	164.3	178.1	342.4	0.863	1.597
-27	16.081	11.361	0.0007	0.1037	1351	9.6	165.5	177.5	343.0	0.868	1.596
-26	17.291	12.451	0.0007	0.0996	1347	10.0	166.7	176.9	343.6	0.873	1.596
-25	18.539	13.576	0.0007	0.0956	1344	10.5	168.0	176.2	344.2	0.878	1.595
-24	19.825	14.739	0.0008	0.0919	1340	10.9	169.2	175.6	344.8	0.883	1.594
-23	21.149	15.938	0.0008	0.0883	1337	11.3	170.5	174.9	345.4	0.888	1.594
-22	22.514	17.177	0.0008	0.0849	1334	11.8	171.7	174.3	346.0	0.893	1.593
-21	23.919	18.454	0.0008	0.0816	1330	12.3	173.0	173.6	346.6	0.898	1.593
-20	25.365	19.771	0.0008	0.0785	1327	12.7	174.2	173.0	347.2	0.903	1.592
-19	26.853	21.130	0.0008	0.0755	1323	13.2	175.5	172.3	347.8	0.908	1.592
-18	28.385	22.530	0.0008	0.0727	1320	13.8	176.8	171.6	348.4	0.913	1.591
-17	29.960	23.972	0.0008	0.0700	1316	14.3	178.0	171.0	349.0	0.918	1.591
-16	31.580	25.459	0.0008	0.0674	1313	14.8	179.3	170.2	349.5	0.923	1.590
-15	33.245	26.989	0.0008	0.0649	1309	15.4	180.6	169.5	350.1	0.927	1.590
-14	34.957	28.565	0.0008	0.0626	1306	16.0	181.8	168.9	350.7	0.932	1.590
-13	36.716	30.188	0.0008	0.0603	1302	16.6	183.1	168.2	351.3	0.937	1.589
-12	38.524	31.857	0.0008	0.0582	1298	17.2	184.4	167.5	351.9	0.942	1.589
-11	40.380	33.575	0.0008	0.0561	1295	17.8	185.7	166.8	352.5	0.947	1.588
-10	42.286	35.342	0.0008	0.0541	1291	18.5	187.0	166.0	353.0	0.952	1.588
-9	44.243	37.158	0.0008	0.0522	1287	19.2	188.2	165.4	353.6	0.957	1.588
-8	46.252	39.026	0.0008	0.0504	1284	19.9	189.5	164.7	354.2	0.962	1.587
-7	48.313	40.945	0.0008	0.0486	1280	20.6	190.8	163.9	354.7	0.966	1.587
-6	50.428	42.917	0.0008	0.0470	1276	21.3	192.1	163.2	355.3	0.971	1.587
-5	52.597	44.943	0.0008	0.0454	1273	22.0	193.4	162.5	355.9	0.976	1.586
-4	54.821	47.024	0.0008	0.0438	1269	22.8	194.7	161.7	356.4	0.981	1.586
-3	57.102	49.161	0.0008	0.0424	1265	23.6	196.1	160.9	357.0	0.986	1.586
-2	59.440	51.354	0.0008	0.0410	1261	24.4	197.4	160.2	357.6	0.990	1.586
-1	61.836	53.605	0.0008	0.0396	1257	25.3	198.7	159.4	358.1	0.995	1.585



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Temp °C	Bubble Pt.	Dew Pt.	Volume (m ³ /kg)		Density (kg/m ³)		Enthalpy (kJ/kg)			Entropy (kJ/kg.K)	
	Pressure	Pressure	Liquid	Vapour	Liquid	Vapour	Liquid	Latent	Vapour	Liquid	Vapour
	Psig	Psig									
0	64.291	55.915	0.0008	0.0383	1254	26.1	200.0	158.7	358.7	1.000	1.585
1	66.806	58.284	0.0008	0.0370	1250	27.0	201.3	157.9	359.2	1.005	1.585
2	69.382	60.714	0.0008	0.0358	1246	27.9	202.7	157.1	359.8	1.010	1.585
3	72.020	63.206	0.0008	0.0347	1242	28.9	204.0	156.3	360.3	1.014	1.584
4	74.721	65.761	0.0008	0.0335	1238	29.8	205.3	155.5	360.8	1.019	1.584
5	77.485	68.379	0.0008	0.0325	1234	30.8	206.7	154.7	361.4	1.024	1.584
6	80.314	71.062	0.0008	0.0314	1230	31.8	208.0	153.9	361.9	1.029	1.584
7	83.209	73.811	0.0008	0.0304	1226	32.9	209.3	153.1	362.4	1.033	1.584
8	86.171	76.627	0.0008	0.0295	1222	33.9	210.7	152.2	362.9	1.038	1.583
9	89.200	79.510	0.0008	0.0286	1218	35.0	212.1	151.4	363.5	1.043	1.583
10	92.298	82.463	0.0008	0.0277	1214	36.2	213.4	150.6	364.0	1.048	1.583
11	95.466	85.486	0.0008	0.0268	1209	37.3	214.8	149.7	364.5	1.052	1.583
12	98.704	88.579	0.0008	0.0260	1205	38.5	216.1	148.9	365.0	1.057	1.583
13	102.013	91.745	0.0008	0.0252	1201	39.7	217.5	148.0	365.5	1.062	1.582
14	105.395	94.983	0.0008	0.0244	1197	41.0	218.9	147.1	366.0	1.067	1.582
15	108.851	98.296	0.0008	0.0237	1192	42.3	220.3	146.2	366.5	1.071	1.582
16	112.381	101.684	0.0008	0.0230	1188	43.6	221.7	145.3	367.0	1.076	1.582
17	115.987	105.148	0.0008	0.0223	1184	44.9	223.0	144.5	367.5	1.081	1.582
18	119.669	108.690	0.0009	0.0216	1179	46.3	224.4	143.6	368.0	1.086	1.582
19	123.429	112.310	0.0009	0.0209	1175	47.8	225.8	142.7	368.5	1.090	1.581
20	127.267	116.010	0.0009	0.0203	1170	49.2	227.3	141.6	368.9	1.095	1.581
21	131.184	119.790	0.0009	0.0197	1166	50.7	228.7	140.7	369.4	1.100	1.581
22	135.182	123.651	0.0009	0.0191	1161	52.3	230.1	139.8	369.9	1.104	1.581
23	139.262	127.596	0.0009	0.0186	1157	53.9	231.5	138.8	370.3	1.109	1.581
24	143.424	131.624	0.0009	0.0180	1152	55.5	232.9	137.9	370.8	1.114	1.580
25	147.669	135.737	0.0009	0.0175	1147	57.2	234.4	136.8	371.2	1.119	1.580
26	151.999	139.936	0.0009	0.0170	1143	58.9	235.8	135.9	371.7	1.123	1.580
27	156.415	144.222	0.0009	0.0165	1138	60.7	237.2	134.9	372.1	1.128	1.580
28	160.916	148.596	0.0009	0.0160	1133	62.5	238.7	133.8	372.5	1.133	1.580
29	165.506	153.059	0.0009	0.0155	1128	64.4	240.2	132.7	372.9	1.138	1.579
30	170.183	157.613	0.0009	0.0151	1123	66.3	241.6	131.8	373.4	1.142	1.579
31	174.951	162.257	0.0009	0.0146	1118	68.3	243.1	130.7	373.8	1.147	1.579
32	179.808	166.995	0.0009	0.0142	1113	70.3	244.6	129.6	374.2	1.152	1.579
33	184.758	171.825	0.0009	0.0138	1108	72.4	246.0	128.6	374.6	1.157	1.579
34	189.799	176.751	0.0009	0.0134	1103	74.6	247.5	127.4	374.9	1.161	1.578
35	194.934	181.772	0.0009	0.0130	1097	76.8	249.0	126.3	375.3	1.166	1.578
36	200.164	186.889	0.0009	0.0127	1092	79.1	250.5	125.2	375.7	1.171	1.578
37	205.489	192.105	0.0009	0.0123	1087	81.4	252.1	123.9	376.0	1.176	1.577
38	210.911	197.419	0.0009	0.0119	1081	83.8	253.6	122.8	376.4	1.180	1.577
39	216.430	202.834	0.0009	0.0116	1076	86.3	255.1	121.6	376.7	1.185	1.577
40	222.047	208.349	0.0009	0.0113	1070	88.9	256.6	120.5	377.1	1.190	1.576
41	227.764	213.967	0.0009	0.0109	1064	91.5	258.2	119.2	377.4	1.195	1.576
42	233.582	219.688	0.0009	0.0106	1059	94.2	259.7	118.0	377.7	1.200	1.576
43	239.500	225.513	0.0010	0.0103	1053	97.0	261.3	116.7	378.0	1.204	1.575
44	245.522	231.444	0.0010	0.0100	1047	99.9	262.9	115.4	378.3	1.209	1.575
45	251.647	237.481	0.0010	0.0097	1041	102.9	264.5	114.0	378.5	1.214	1.574
46	257.876	243.625	0.0010	0.0094	1035	106.0	266.1	112.7	378.8	1.219	1.574
47	264.210	249.878	0.0010	0.0092	1028	109.2	267.7	111.3	379.0	1.224	1.573
48	270.651	256.241	0.0010	0.0089	1022	112.4	269.3	109.9	379.2	1.229	1.573
49	277.200	262.715	0.0010	0.0086	1015	115.9	270.9	108.6	379.5	1.234	1.572
50	283.856	269.300	0.0010	0.0084	1009	119.4	272.6	107.1	379.7	1.239	1.572