

Isobaric Properties for Carbon dioxide

Isobaric Data for P = 45.022 bar

Temperature (C)	Pressure (bar)	Density (kg/m3)	Volume (m3/kg)	Internal Energy (kJ/kg)	Enthalpy (kJ/kg)	Entropy (J/g*K)	Cv (J/g*K)	Cp (J/g*K)	Sound Spd. (m/s)	Joule-Thomson (K/bar)	Viscosity (uPa*s)	Therm. Cond. (W/m*K)	Phase
10.000	45.022	135.16	0.0073988	389.57	422.88	1.7847	0.95074	2.5578	205.41	1.2689	16.059	0.024206	vapor
15.000	45.022	124.63	0.0080236	398.04	434.16	1.8242	0.88543	2.0283	214.25	1.2081	16.063	0.022649	vapor
20.000	45.022	116.98	0.0085487	405.10	443.58	1.8566	0.84874	1.7640	221.30	1.1507	16.143	0.021967	vapor
25.000	45.022	110.91	0.0090162	411.38	451.97	1.8850	0.82497	1.6017	227.35	1.0974	16.261	0.021659	vapor
30.000	45.022	105.88	0.0094451	417.16	459.69	1.9106	0.80859	1.4911	232.71	1.0479	16.404	0.021553	vapor
35.000	45.022	101.57	0.0098458	422.60	466.93	1.9343	0.79686	1.4107	237.60	1.0019	16.564	0.021572	vapor
40.000	45.022	97.800	0.010225	427.79	473.82	1.9565	0.78826	1.3496	242.11	0.95915	16.735	0.021674	vapor
45.000	45.022	94.456	0.010587	432.78	480.45	1.9775	0.78191	1.3018	246.32	0.91924	16.915	0.021834	vapor
50.000	45.022	91.451	0.010935	437.63	486.86	1.9975	0.77727	1.2634	250.29	0.88190	17.101	0.022038	vapor
55.000	45.022	88.725	0.011271	442.35	493.09	2.0167	0.77397	1.2322	254.05	0.84687	17.293	0.022274	vapor
60.000	45.022	86.231	0.011597	446.98	499.19	2.0351	0.77171	1.2064	257.63	0.81394	17.489	0.022536	vapor
65.000	45.022	83.935	0.011914	451.53	505.16	2.0529	0.77029	1.1848	261.07	0.78294	17.687	0.022819	vapor
70.000	45.022	81.808	0.012224	456.01	511.04	2.0702	0.76953	1.1667	264.36	0.75371	17.889	0.023118	vapor
75.000	45.022	79.829	0.012527	460.44	516.84	2.0869	0.76931	1.1512	267.54	0.72612	18.093	0.023431	vapor
80.000	45.022	77.980	0.012824	464.82	522.56	2.1032	0.76953	1.1381	270.62	0.70004	18.298	0.023755	vapor
85.000	45.022	76.245	0.013116	469.17	528.22	2.1192	0.77014	1.1268	273.59	0.67535	18.504	0.024089	vapor
90.000	45.022	74.612	0.013403	473.49	533.83	2.1347	0.77106	1.1172	276.49	0.65196	18.712	0.024431	vapor

Isobaric Data for P = 14.278 bar

Temperature (C)	Pressure (bar)	Density (kg/m3)	Volume (m3/kg)	Internal Energy (kJ/kg)	Enthalpy (kJ/kg)	Entropy (J/g*K)	Cv (J/g*K)	Cp (J/g*K)	Sound Spd. (m/s)	Joule-Thomson (K/bar)	Viscosity (uPa*s)	Therm. Cond. (W/m*K)	Phase
-30.000	14.278	37.099	0.026955	398.33	436.82	1.9980	0.71745	1.1406	222.54	1.9318	12.464	0.013680	vapor
-25.000	14.278	35.790	0.027941	402.52	442.42	2.0207	0.70822	1.1002	226.54	1.8183	12.701	0.013947	vapor
-20.000	14.278	34.615	0.028889	406.59	447.84	2.0424	0.70092	1.0682	230.32	1.7158	12.940	0.014237	vapor
-15.000	14.278	33.548	0.029808	410.55	453.11	2.0630	0.69555	1.0430	233.91	1.6228	13.178	0.014544	vapor
-10.000	14.278	32.572	0.030701	414.44	458.27	2.0828	0.69188	1.0230	237.32	1.5378	13.418	0.014865	vapor
-5.0000	14.278	31.672	0.031574	418.27	463.35	2.1019	0.68962	1.0071	240.59	1.4598	13.657	0.015198	vapor
0.0000	14.278	30.838	0.032428	422.05	468.35	2.1204	0.68848	0.99450	243.74	1.3879	13.896	0.015542	vapor
5.0000	14.278	30.060	0.033267	425.80	473.30	2.1383	0.68824	0.98440	246.76	1.3215	14.136	0.015895	vapor
10.000	14.278	29.332	0.034092	429.52	478.20	2.1558	0.68871	0.97635	249.69	1.2600	14.375	0.016255	vapor

Reference States

Internal energy	U = 0 at 273.16 K for saturated liquid.
Entropy	S = 0 at 273.16 K for saturated liquid.

Notes

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