

Table 19 Refrigerant 502 Properties of Liquid and Saturated Vapor*

Temp F	Pressure		Volume cu ft/lb	Density lb/cu ft	Enthalpy** Btu/lb		Entropy** Btu/(lb) (°R)	Temp F	Pressure		Volume cu ft/lb	Density lb/cu ft	Enthalpy** Btu/lb		Entropy** Btu/(lb) (°R)
	psia	psig			Vapor v _g	Liquid 1/v _f			Vapor v _g	Liquid 1/v _f			psia	psig	
-100	3.230	22.84	10.837	98.49	-15.15	87.37	-0.0358	35	87.25	72.50	0.4854	83.46	20.17	84.14	0.0438
-95	3.845	22.09	9.2100	96.01	-13.91	85.02	-0.0354	40	94.90	80.20	0.4465	82.50	21.57	84.66	0.0432
-90	4.535	20.65	7.8792	97.53	-12.65	82.87	-0.0350	45	103.0	88.30	0.4114	81.13	22.99	85.17	0.0436
-85	5.300	19.01	6.7703	99.04	-11.41	80.83	-0.0347	50	111.5	96.80	0.3793	81.44	24.42	85.67	0.0432
-80	6.275	17.14	5.8453	99.65	-10.17	78.97	-0.0343	55	120.7	106.0	0.3501	80.75	25.87	86.15	0.0430
-75	7.415	15.07	5.0696	99.05	-8.90	77.43	-0.0340	60	130.3	115.8	0.3254	80.04	27.32	86.62	0.0434
-70	8.690	12.83	4.4158	98.53	-7.63	75.98	-0.0337	65	140.5	125.8	0.2990	79.32	28.78	87.06	0.0438
-65	9.996	10.46	3.8621	98.04	-6.39	74.63	-0.0334	70	151.3	136.6	0.2766	78.59	30.25	87.45	0.0442
-60	11.28	8.94	3.3910	97.58	-5.18	73.38	-0.0331	75	162.7	148.0	0.2561	77.84	31.74	87.88	0.0446
-55	12.52	7.63	2.9894	97.16	-4.03	72.23	-0.0328	80	174.6	159.9	0.2372	77.07	33.24	88.26	0.0450
-50	14.74	5.04	2.6428	96.77	-2.87	71.07	-0.0325	85	187.2	172.3	0.2197	76.29	34.75	88.61	0.0454
-45	16.75	3.05	2.3451	96.40	-1.79	70.02	-0.0322	90	199.5	185.6	0.2036	75.48	36.29	88.93	0.0458
-40	18.57	1.25	2.0874	96.05	-0.75	69.07	-0.0319	95	211.4	199.7	0.1888	74.65	37.82	89.23	0.0462
-35	21.42	4.25	1.8537	95.71	1.30	68.23	-0.0316	100	222.9	214.4	0.1750	73.80	39.37	89.47	0.0466
-30	24.10	9.40	1.6537	95.38	2.60	67.44	-0.0313	105	234.4	229.7	0.1621	72.94	40.94	89.68	0.0470
-25	27.02	15.33	1.4858	95.04	3.90	66.70	-0.0310	110	245.8	245.8	0.1502	72.01	42.52	89.85	0.0474
-20	30.25	21.53	1.3486	94.69	5.21	66.01	-0.0307	115	257.3	262.6	0.1391	71.07	44.11	89.96	0.0478
-15	33.69	28.19	1.2369	94.33	6.54	65.37	-0.0304	120	269.0	280.3	0.1286	70.08	45.71	90.02	0.0482
-10	37.42	35.26	1.1456	93.96	7.86	64.78	-0.0301	125	281.4	298.7	0.1191	69.05	47.33	90.05	0.0486
-5	41.33	42.84	1.0706	93.58	9.20	64.23	-0.0298	130	293.7	317.0	0.1101	67.96	48.95	90.05	0.0490
0	45.48	50.14	1.0001	93.19	10.54	63.70	-0.0295	135	305.7	335.1	0.1016	66.81	50.56	90.05	0.0494
5	50.00	57.66	0.9334	92.79	11.89	63.19	-0.0292	140	317.4	353.1	0.0934	65.59	52.17	90.05	0.0498
10	54.79	65.45	0.8703	92.38	13.25	62.70	-0.0289	145	328.8	371.0	0.0856	64.33	53.77	90.05	0.0502
15	59.77	73.57	0.8103	91.96	14.62	62.23	-0.0286	150	340.0	388.8	0.0781	63.04	55.37	90.05	0.0506
20	64.94	81.99	0.7531	91.53	15.99	61.78	-0.0283	155	351.0	406.5	0.0709	61.71	56.96	90.05	0.0510
25	70.29	90.68	0.6985	91.09	17.37	61.35	-0.0280	160	361.8	424.1	0.0639	60.35	58.54	90.05	0.0514
30	75.81	99.64	0.6463	90.64	18.76	60.93	-0.0277	165	372.4	441.6	0.0574	58.99	60.11	90.05	0.0518
35	81.49	108.94	0.5963	90.18	20.15	60.52	-0.0274	170	382.8	459.0	0.0510	57.62	61.67	90.05	0.0522
40	87.32	118.47	0.5483	89.71	21.55	60.12	-0.0271	175	393.0	476.3	0.0446	56.25	63.22	90.05	0.0526
45	93.30	128.22	0.5021	89.23	22.96	59.73	-0.0268	180	403.0	493.5	0.0382	54.88	64.77	90.05	0.0530
50	99.43	138.19	0.4576	88.74	24.38	59.35	-0.0265	185	412.8	510.6	0.0318	53.50	66.31	90.05	0.0534
55	105.70	148.37	0.4147	88.25	25.81	58.98	-0.0262	190	422.4	527.6	0.0254	52.11	67.84	90.05	0.0538
60	112.12	158.76	0.3732	87.75	27.25	58.62	-0.0259	195	431.8	544.5	0.0190	50.72	69.36	90.05	0.0542
65	118.69	169.35	0.3330	87.24	28.70	58.27	-0.0256	200	441.0	561.3	0.0126	49.33	70.87	90.05	0.0546
70	125.41	180.14	0.2940	86.72	30.16	57.93	-0.0253	205	450.0	578.0	0.0062	47.94	72.37	90.05	0.0550
75	132.28	191.13	0.2561	86.19	31.63	57.60	-0.0250	210	458.8	594.6	0.0000	46.55	73.86	90.05	0.0554
80	139.30	202.32	0.2192	85.65	33.11	57.28	-0.0247	215	467.3	611.1	0.0000	45.16	75.34	90.05	0.0558
85	146.47	213.71	0.1833	85.10	34.60	56.97	-0.0244	220	475.5	627.5	0.0000	43.77	76.81	90.05	0.0562
90	153.79	225.29	0.1483	84.54	36.10	56.67	-0.0241	225	483.6	643.8	0.0000	42.38	78.28	90.05	0.0566
95	161.26	237.06	0.1142	83.97	37.61	56.38	-0.0238	230	491.6	660.0	0.0000	40.99	79.74	90.05	0.0570
100	168.88	249.01	0.0810	83.39	39.13	56.10	-0.0235	235	499.5	676.1	0.0000	39.60	81.19	90.05	0.0574
105	176.64	261.14	0.0487	82.80	40.66	55.83	-0.0232	240	507.3	692.1	0.0000	38.21	82.63	90.05	0.0578
110	184.55	273.45	0.0164	82.20	42.20	55.57	-0.0229	245	515.0	708.0	0.0000	36.82	84.06	90.05	0.0582
115	192.61	285.94	0.0000	81.59	43.75	55.32	-0.0226	250	522.6	723.8	0.0000	35.43	85.48	90.05	0.0586
120	200.82	298.61	0.0000	80.97	45.31	55.08	-0.0223	255	530.1	739.5	0.0000	34.04	86.89	90.05	0.0590
125	209.18	311.46	0.0000	80.34	46.88	54.85	-0.0220	260	537.5	755.1	0.0000	32.65	88.29	90.05	0.0594
130	217.69	324.49	0.0000	79.70	48.46	54.60	-0.0217	265	545.0	770.6	0.0000	31.26	89.68	90.05	0.0598
135	226.35	337.70	0.0000	79.05	50.05	54.35	-0.0214	270	552.4	786.0	0.0000	29.87	91.06	90.05	0.0602
140	235.16	351.09	0.0000	78.39	51.65	54.10	-0.0211	275	559.8	801.3	0.0000	28.48	92.43	90.05	0.0606
145	244.12	364.66	0.0000	77.72	53.26	53.85	-0.0208	280	567.1	816.5	0.0000	27.09	93.79	90.05	0.0610
150	253.23	378.41	0.0000	77.05	54.88	53.60	-0.0205	285	574.4	831.6	0.0000	25.70	95.14	90.05	0.0614
155	262.49	392.34	0.0000	76.37	56.51	53.35	-0.0202	290	581.6	846.6	0.0000	24.31	96.48	90.05	0.0618
160	271.90	406.45	0.0000	75.68	58.15	53.10	-0.0199	295	588.8	861.5	0.0000	22.92	97.81	90.05	0.0622
165	281.46	420.74	0.0000	74.98	59.80	52.85	-0.0196	300	595.9	876.3	0.0000	21.53	99.13	90.05	0.0626
170	291.17	435.21	0.0000	74.27	61.46	52.60	-0.0193	305	603.0	891.0	0.0000	20.14	100.44	90.05	0.0630
175	301.03	449.86	0.0000	73.55	63.13	52.35	-0.0190	310	610.0	905.6	0.0000	18.75	101.74	90.05	0.0634
180	311.04	464.69	0.0000	72.82	64.81	52.10	-0.0187	315	616.9	920.1	0.0000	17.36	103.03	90.05	0.0638
185	321.20	479.70	0.0000	72.08	66.50	51.85	-0.0184	320	623.7	934.5	0.0000	15.97	104.31	90.05	0.0642
190	331.51	494.89	0.0000	71.33	68.20	51.60	-0.0181	325	630.4	948.8	0.0000	14.58	105.58	90.05	0.0646
195	341.97	510.26	0.0000	70.57	69.91	51.35	-0.0178	330	637.0	963.0	0.0000	13.19	106.84	90.05	0.0650
200	352.58	525.81	0.0000	69.80	71.63	51.10	-0.0175	335	643.5	977.1	0.0000	11.80	108.09	90.05	0.0654
205	363.34	541.54	0.0000	69.02	73.36	50.85	-0.0172	340	650.0	991.1	0.0000	10.41	109.33	90.05	0.0658
210	374.25	557.45	0.0000	68.23	75.10	50.60	-0.0169	345	656.4	1005.0	0.0000	9.02	110.56	90.05	0.0662
215	385.31	573.54	0.0000	67.43	76.85	50.35	-0.0166	350	662.7	1018.8	0.0000	7.63	111.78	90.05	0.0666
220	396.52	589.81	0.0000	66.62	78.61	50.10	-0.0163	355	668.9	1032.5	0.0000	6.24	113.00	90.05	0.0670
225	407.88	606.26	0.0000	65.80	80.38	49.85	-0.0160	360	675.0	1046.1	0.0000	4.85	114.22	90.05	0.0674
230	419.39	622.89	0.0000	64.97	82.16	49.60	-0.0157	365	681.0	1059.6	0.0000	3.46	115.44	90.05	0.0678
235	431.05	639.70	0.0000	64.13	83.95	49.35	-0.0154	370	686.9	1073.0	0.0000	2.07	116.66	90.05	0.0682
240	442.86	656.69	0.0000	63.28	85.75	49.10	-0.0151	375	692.7	1086.3	0.0000	0.68	117.88	90.05	0.0686
245	454.82	673.86	0.0000	62.42	87.56	48.85	-0.0148	380	698.4	1100.0	0.0000	0.00	119.10	90.05	0.0690