R-454B PT Chart

Gauge & Wire

Saturation pressure in psig. Liquid = bubble point (use for subcooling), Vapor = dew point (use for superheat). * = inches of mercury vacuum.

°F	°C	Liquid	Vapor	°F	°C	Liquid	Vapor	°F	°C	Liquid	Vapor	°F	°C	Liquid	Vapor
-40	**-40.0**	**9.5**	**8.4**	8	-13.3	55.7	52.7	56	13.3	150.3	144.1	104	40.0	318.3	308.0
-39	-39.4	10.1	9.0	9	-12.8	57.1	54.1	57	13.9	153.0	146.7	105	40.6	322.8	312.5
-38	-38.9	10.8	9.6	**10**	**-12.2**	**58.5**	**55.4**	58	14.4	155.7	149.3	106	41.1	327.3	316.9
-37	-38.3	11.4	10.2	11	-11.7	60.0	56.8	59	15.0	158.4	151.9	107	41.7	331.9	321.4
-36	-37.8	12.1	10.8	12	-11.1	61.4	58.2	**60**	**15.6**	**161.1**	**154.6**	108	42.2	336.5	326.0
-35	-37.2	12.7	11.4	13	-10.6	62.9	59.7	61	16.1	163.9	157.3	109	42.8	341.2	330.6
-34	-36.7	13.4	12.1	14	-10.0	64.4	61.1	62	16.7	166.7	160.1	**110**	**43.3**	**345.9**	**335.2**
-33	-36.1	14.1	12.8	15	-9.4	66.0	62.6	63	17.2	169.6	162.8	111	43.9	350.6	339.9
-32	-35.6	14.8	13.4	16	-8.9	67.5	64.1	64	17.8	172.5	165.6	112	44.4	355.4	344.6
-31	-35.0	15.5	14.1	17	-8.3	69.1	65.6	65	18.3	175.4	168.5	113	45.0	360.3	349.4
-30	**-34.4**	**16.2**	**14.8**	18	-7.8	70.7	67.1	66	18.9	178.3	171.3	114	45.6	365.2	354.3
-29	-33.9	17.0	15.5	19	-7.2	72.3	68.7	67	19.4	181.3	174.2	115	46.1	370.2	359.1
-28	-33.3	17.7	16.3	**20**	**-6.7**	**73.9**	**70.3**	68	20.0	184.4	177.2	116	46.7	375.2	364.1
-27	-32.8	18.5	17.0	21	-6.1	75.6	71.9	69	20.6	187.4	180.1	117	47.2	380.2	369.1
-26	-32.2	19.3	17.7	22	-5.6	77.3	73.5	**70**	**21.1**	**190.5**	**183.1**	118	47.8	385.3	374.1
-25	-31.7	20.1	18.5	23	-5.0	79.0	75.2	71	21.7	193.6	186.2	119	48.3	390.5	379.2
-24	-31.1	20.9	19.3	24	-4.4	80.7	76.8	72	22.2	196.8	189.3	**120**	**48.9**	**395.7**	**384.3**
-23	-30.6	21.7	20.1	25	-3.9	82.5	78.5	73	22.8	200.0	192.4	121	49.4	400.9	389.5
-22	-30.0	22.6	20.9	26	-3.3	84.3	80.3	74	23.3	203.2	195.5	122	50.0	406.2	394.8
-21	-29.4	23.4	21.7	27	-2.8	86.1	82.0	75	23.9	206.5	198.7	123	50.6	411.6	400.1
-20	**-28.9**	**24.3**	**22.6**	28	-2.2	87.9	83.8	76	24.4	209.8	201.9	124	51.1	417.0	405.4
-19	-28.3	25.2	23.4	29	-1.7	89.8	85.6	77	25.0	213.1	205.2	125	51.7	422.4	410.8
-18	-27.8	26.1	24.3	**30**	**-1.1**	**91.7**	**87.4**	78	25.6	216.5	208.5	126	52.2	427.9	416.3
-17	-27.2	27.0	25.2	31	-0.6	93.6	89.2	79	26.1	219.9	211.8	127	52.8	433.5	421.8
-16	-26.7	28.0	26.1	32	0.0	95.5	91.1	**80**	**26.7**	**223.4**	**215.2**	128	53.3	439.1	427.4
-15	-26.1	28.9	27.0	33	0.6	97.5	93.0	81	27.2	226.9	218.6	129	53.9	444.8	433.0
-14	-25.6	29.9	27.9	34	1.1	99.5	94.9	82	27.8	230.4	222.0	**130**	**54.4**	**450.5**	**438.7**
-13	-25.0	30.9	28.8	35	1.7	101.5	96.9	83	28.3	234.0	225.5	131	55.0	456.3	444.5
-12	-24.4	31.9	29.8	36	2.2	103.5	98.8	84	28.9	237.6	229.0	132	55.6	462.1	450.3
-11	-23.9	32.9	30.8	37	2.8	105.6	100.8	85	29.4	241.2	232.6	133	56.1	468.0	456.1
-10	**-23.3**	**33.9**	**31.8**	38	3.3	107.7	102.9	86	30.0	244.9	236.2	134	56.7	473.9	462.0
-9	-22.8	35.0	32.8	39	3.9	109.8	104.9	87	30.6	248.6	239.8	135	57.2	479.9	468.0
-8	-22.2	36.1	33.8	**40**	**4.4**	**112.0**	**107.0**	88	31.1	252.4	243.5	136	57.8	485.9	474.1
-7	-21.7	37.1	34.9	41	5.0	114.1	109.1	89	31.7	256.2	247.2	137	58.3	492.1	480.2
-6	-21.1	38.2	35.9	42	5.6	116.4	111.2	**90**	**32.2**	**260.0**	**251.0**	138	58.9	498.2	486.3
-5	-20.6	39.4	37.0	43	6.1	118.6	113.4	91	32.8	263.9	254.8	139	59.4	504.4	492.6
-4	-20.0	40.5	38.1	44	6.7	120.9	115.6	92	33.3	267.9	258.6	**140**	**60.0**	**510.7**	**498.8**
-3	-19.4	41.7	39.2	45	7.2	123.1	117.8	93	33.9	271.8	262.5	141	60.6	517.1	505.2
-2	-18.9	42.9	40.4	46	7.8	125.5	120.0	94	34.4	275.8	266.4	142	61.1	523.5	511.6
-1	-18.3	44.1	41.5	47	8.3	127.8	122.3	95	35.0	279.9	270.4	143	61.7	529.9	518.1
0	**-17.8**	**45.3**	**42.7**	48	8.9	130.2	124.6	96	35.6	284.0	274.4	144	62.2	536.4	524.6
1	-17.2	46.5	43.9	49	9.4	132.6	127.0	97	36.1	288.1	278.4	145	62.8	543.0	531.3
2	-16.7	47.8	45.1	**50**	**10.0**	**135.0**	**129.3**	98	36.7	292.3	282.5	146	63.3	549.6	538.0
3	-16.1	49.0	46.3	51	10.6	137.5	131.7	99	37.2	296.5	286.7	147	63.9	556.3	544.7
4	-15.6	50.3	47.6	52	11.1	140.0	134.1	**100**	**37.8**	**300.8**	**290.9**	148	64.4	563.1	551.5
5	-15.0	51.7	48.8	53	11.7	142.5	136.6	101	38.3	305.1	295.1	149	65.0	569.9	558.4
6	-14.4	53.0	50.1	54	12.2	145.1	139.1	102	38.9	309.4	299.4	**150**	**65.6**	**576.8**	**565.4**
7	-13.9	54.3	51.4	55	12.8	147.7	141.6	103	39.4	313.8	303.7				

Source: Chemours, Thermodynamic Properties of Opteon XL41 (R-454B), Engineering Units (NIST REFPROP 10); whole-degree rows interpolated.
Checked against: Arkema (max difference 0.05 psi).
Gauge pressure relative to 14.696 psia (sea level). Reference only: follow the equipment manufacturer's charging instructions.