R-410A 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**	**10.8**	**10.7**	8	-13.3	59.5	59.2	56	13.3	159.3	158.7	104	40.0	337.1	336.1
-39	-39.4	11.4	11.3	9	-12.8	60.9	60.7	57	13.9	162.1	161.5	105	40.6	341.9	340.8
-38	-38.9	12.1	12.0	**10**	**-12.2**	**62.4**	**62.2**	58	14.4	164.9	164.4	106	41.1	346.7	345.7
-37	-38.3	12.7	12.6	11	-11.7	63.9	63.7	59	15.0	167.8	167.2	107	41.7	351.6	350.5
-36	-37.8	13.4	13.3	12	-11.1	65.5	65.2	**60**	**15.6**	**170.7**	**170.1**	108	42.2	356.5	355.4
-35	-37.2	14.1	14.0	13	-10.6	67.1	66.8	61	16.1	173.7	173.1	109	42.8	361.4	360.4
-34	-36.7	14.8	14.7	14	-10.0	68.6	68.4	62	16.7	176.6	176.0	**110**	**43.3**	**366.5**	**365.4**
-33	-36.1	15.6	15.5	15	-9.4	70.3	70.0	63	17.2	179.6	179.0	111	43.9	371.5	370.4
-32	-35.6	16.3	16.2	16	-8.9	71.9	71.6	64	17.8	182.7	182.1	112	44.4	376.6	375.5
-31	-35.0	17.1	16.9	17	-8.3	73.5	73.3	65	18.3	185.8	185.1	113	45.0	381.8	380.7
-30	**-34.4**	**17.8**	**17.7**	18	-7.8	75.2	74.9	66	18.9	188.9	188.3	114	45.6	387.0	385.9
-29	-33.9	18.6	18.5	19	-7.2	76.9	76.6	67	19.4	192.0	191.4	115	46.1	392.3	391.2
-28	-33.3	19.4	19.3	**20**	**-6.7**	**78.7**	**78.4**	68	20.0	195.2	194.6	116	46.7	397.6	396.5
-27	-32.8	20.2	20.1	21	-6.1	80.4	80.1	69	20.6	198.5	197.8	117	47.2	403.0	401.9
-26	-32.2	21.0	20.9	22	-5.6	82.2	81.9	**70**	**21.1**	**201.7**	**201.1**	118	47.8	408.4	407.3
-25	-31.7	21.9	21.8	23	-5.0	84.0	83.7	71	21.7	205.0	204.4	119	48.3	413.9	412.8
-24	-31.1	22.7	22.6	24	-4.4	85.8	85.5	72	22.2	208.4	207.7	**120**	**48.9**	**419.5**	**418.3**
-23	-30.6	23.6	23.5	25	-3.9	87.7	87.4	73	22.8	211.8	211.1	121	49.4	425.1	423.9
-22	-30.0	24.5	24.4	26	-3.3	89.6	89.2	74	23.3	215.2	214.5	122	50.0	430.7	429.6
-21	-29.4	25.4	25.3	27	-2.8	91.5	91.1	75	23.9	218.6	217.9	123	50.6	436.4	435.3
-20	**-28.9**	**26.3**	**26.2**	28	-2.2	93.4	93.1	76	24.4	222.1	221.4	124	51.1	442.2	441.0
-19	-28.3	27.3	27.1	29	-1.7	95.4	95.0	77	25.0	225.7	224.9	125	51.7	448.0	446.8
-18	-27.8	28.2	28.1	**30**	**-1.1**	**97.4**	**97.0**	78	25.6	229.2	228.5	126	52.2	453.9	452.7
-17	-27.2	29.2	29.0	31	-0.6	99.4	99.0	79	26.1	232.9	232.1	127	52.8	459.9	458.7
-16	-26.7	30.2	30.0	32	0.0	101.4	101.1	**80**	**26.7**	**236.5**	**235.7**	128	53.3	465.9	464.7
-15	-26.1	31.2	31.0	33	0.6	103.5	103.1	81	27.2	240.2	239.4	129	53.9	471.9	470.7
-14	-25.6	32.2	32.0	34	1.1	105.6	105.2	82	27.8	243.9	243.2	**130**	**54.4**	**478.0**	**476.8**
-13	-25.0	33.2	33.1	35	1.7	107.7	107.3	83	28.3	247.7	246.9	131	55.0	484.2	483.0
-12	-24.4	34.3	34.1	36	2.2	109.9	109.5	84	28.9	251.5	250.7	132	55.6	490.5	489.3
-11	-23.9	35.4	35.2	37	2.8	112.1	111.7	85	29.4	255.4	254.6	133	56.1	496.8	495.6
-10	**-23.3**	**36.5**	**36.3**	38	3.3	114.3	113.9	86	30.0	259.3	258.5	134	56.7	503.1	501.9
-9	-22.8	37.6	37.4	39	3.9	116.5	116.1	87	30.6	263.2	262.4	135	57.2	509.5	508.4
-8	-22.2	38.7	38.5	**40**	**4.4**	**118.8**	**118.4**	88	31.1	267.2	266.4	136	57.8	516.0	514.9
-7	-21.7	39.9	39.7	41	5.0	121.1	120.7	89	31.7	271.3	270.4	137	58.3	522.6	521.4
-6	-21.1	41.0	40.8	42	5.6	123.4	123.0	**90**	**32.2**	**275.3**	**274.5**	138	58.9	529.2	528.0
-5	-20.6	42.2	42.0	43	6.1	125.8	125.3	91	32.8	279.5	278.6	139	59.4	535.9	534.7
-4	-20.0	43.4	43.2	44	6.7	128.2	127.7	92	33.3	283.6	282.7	**140**	**60.0**	**542.6**	**541.5**
-3	-19.4	44.6	44.4	45	7.2	130.6	130.1	93	33.9	287.8	286.9	141	60.6	549.4	548.3
-2	-18.9	45.9	45.7	46	7.8	133.0	132.6	94	34.4	292.1	291.2	142	61.1	556.3	555.2
-1	-18.3	47.2	46.9	47	8.3	135.5	135.0	95	35.0	296.4	295.4	143	61.7	563.3	562.2
0	**-17.8**	**48.4**	**48.2**	48	8.9	138.0	137.5	96	35.6	300.7	299.8	144	62.2	570.3	569.2
1	-17.2	49.7	49.5	49	9.4	140.6	140.1	97	36.1	305.1	304.1	145	62.8	577.4	576.3
2	-16.7	51.1	50.8	**50**	**10.0**	**143.1**	**142.6**	98	36.7	309.5	308.6	146	63.3	584.5	583.5
3	-16.1	52.4	52.2	51	10.6	145.8	145.2	99	37.2	314.0	313.0	147	63.9	591.8	590.8
4	-15.6	53.8	53.5	52	11.1	148.4	147.9	**100**	**37.8**	**318.5**	**317.6**	148	64.4	599.1	598.1
5	-15.0	55.2	54.9	53	11.7	151.1	150.5	101	38.3	323.1	322.1	149	65.0	606.4	605.5
6	-14.4	56.6	56.3	54	12.2	153.8	153.2	102	38.9	327.7	326.7	**150**	**65.6**	**613.9**	**613.0**
7	-13.9	58.0	57.8	55	12.8	156.5	156.0	103	39.4	332.4	331.4				

Source: calculated with CoolProp 8.1.0 (pseudo-pure fluid model).
Checked against: Arkema (max difference 0.13 psi); Chemours (max difference 2.22 psi).
Gauge pressure relative to 14.696 psia (sea level). Reference only: follow the equipment manufacturer's charging instructions.