

R-410A pressure–temperature chart

R-32/R-125 (50/50) — a zeotropic blend of R-32 and R-125, 50 / 50 % by mass. Also written R410A. Bubble and dew pressures from −70 to 70 °C, every 2 K, in kPa gauge and bar gauge, computed with CoolProp.

SAFETY CLASS A1 Lower toxicity, no flame propagation	GWP, 100-YEAR 2,088 (AR4) · 2,256 (AR6) IPCC, summed from its composition	ODP 0 Montreal Protocol	
CRITICAL POINT 71.34 °C · 4,901.2 kPa abs CoolProp, from its equation of state	BUBBLE POINT −51.44 °C At 101.325 kPa	DEW POINT −51.36 °C At 101.325 kPa	GLIDE 0.08 K Dew less bubble, at 101.325 kPa

BUBBLE · LIQUID					DEW · VAPOUR				
T (°C)	kPa g	bar g	kPa g	bar g	T (°C)	kPa g	bar g	kPa g	bar g
−70	−65.7	−0.66	−65.9	−0.66	2	751.7	7.52	748.9	7.49
−68	−61.0	−0.61	−61.2	−0.61	4	806.5	8.06	803.5	8.04
−66	−55.9	−0.56	−56.1	−0.56	6	863.9	8.64	860.8	8.61
−64	−50.2	−0.50	−50.4	−0.50	8	924.1	9.24	920.8	9.21
−62	−43.9	−0.44	−44.2	−0.44	10	987.0	9.87	983.5	9.83
−60	−37.1	−0.37	−37.4	−0.37	12	1,052.7	10.53	1,049.1	10.49
−58	−29.6	−0.30	−29.9	−0.30	14	1,121.5	11.21	1,117.6	11.18
−56	−21.4	−0.21	−21.8	−0.22	16	1,193.2	11.93	1,189.1	11.89
−54	−12.5	−0.13	−12.9	−0.13	18	1,268.1	12.68	1,263.8	12.64
−52	−2.8	−0.03	−3.2	−0.03	20	1,346.1	13.46	1,341.6	13.42
−50	7.7	0.08	7.2	0.07	22	1,427.5	14.27	1,422.7	14.23
−48	19.0	0.19	18.6	0.19	24	1,512.2	15.12	1,507.3	15.07
−46	31.3	0.31	30.8	0.31	26	1,600.5	16.00	1,595.3	15.95
−44	44.6	0.45	44.0	0.44	28	1,692.3	16.92	1,686.8	16.87
−42	58.8	0.59	58.2	0.58	30	1,787.8	17.88	1,782.1	17.82
−40	74.2	0.74	73.5	0.74	32	1,887.1	18.87	1,881.1	18.81
−38	90.7	0.91	89.9	0.90	34	1,990.3	19.90	1,984.0	19.84
−36	108.3	1.08	107.6	1.08	36	2,097.5	20.97	2,091.0	20.91
−34	127.2	1.27	126.4	1.26	38	2,208.8	22.09	2,202.0	22.02
−32	147.4	1.47	146.5	1.47	40	2,324.3	23.24	2,317.3	23.17
−30	169.0	1.69	168.0	1.68	42	2,444.2	24.44	2,436.9	24.37
−28	192.0	1.92	190.9	1.91	44	2,568.5	25.69	2,561.0	25.61
−26	216.4	2.16	215.3	2.15	46	2,697.5	26.97	2,689.8	26.90
−24	242.4	2.42	241.2	2.41	48	2,831.2	28.31	2,823.3	28.23
−22	270.1	2.70	268.8	2.69	50	2,969.7	29.70	2,961.7	29.62
−20	299.4	2.99	298.0	2.98	52	3,113.3	31.13	3,105.2	31.05
−18	330.4	3.30	328.9	3.29	54	3,262.1	32.62	3,253.9	32.54
−16	363.2	3.63	361.7	3.62	56	3,416.3	34.16	3,408.0	34.08
−14	397.9	3.98	396.3	3.96	58	3,575.9	35.76	3,567.8	35.68
−12	434.6	4.35	432.8	4.33	60	3,741.3	37.41	3,733.5	37.34
−10	473.3	4.73	471.4	4.71	62	3,912.7	39.13	3,905.3	39.05
−8	514.0	5.14	512.0	5.12	64	4,090.2	40.90	4,083.4	40.83
−6	557.0	5.57	554.8	5.55	66	4,274.1	42.74	4,268.3	42.68
−4	602.1	6.02	599.8	6.00	68	4,464.8	44.65	4,460.5	44.60
−2	649.5	6.50	647.1	6.47	70	4,662.6	46.63	4,660.4	46.60
0	699.4	6.99	696.8	6.97					

NOTES	Gauge pressure is absolute pressure less a standard atmosphere, 101.325 kPa; below it, gauge pressure is negative. Bubble: saturated liquid — read subcooling from it. Dew: saturated vapour — read superheat from it.
SOURCES	Computed with CoolProp 7.2.1dev (HEOS backend, MIT licence), from published equations of state. Cite: Bell, I.H., Wronski, J., Quoilin, S., Lemort, V. (2014). Pure and pseudo-pure fluid thermophysical property evaluation and the open-source thermophysical property library CoolProp. Ind. Eng. Chem. Res. 53(6), 2498-2508. GWP, ODP, safety class and composition: UNEP RTOC 2018, DCCEEW (Australian Government), IPCC AR4 (2007), IPCC AR6 (2021), Montreal Protocol, ASHRAE refrigerant designations, GHG Protocol (2024).
ONLINE	kelvin.engineering/refrigerants/r-410a — this table in kPa absolute, and the P–h diagram kelvin.engineering/tools/superheat-subcooling?r=r-410a — superheat and subcooling calculator
VERIFY	These figures must be verified by a qualified professional before they're relied on.