R-12 pressure–temperature chart

Dichlorodifluoromethane — a single-component CFC. Also written R12. Saturation pressure from −70 to 110 °C, every 2 K, in kPa gauge and bar gauge, computed with CoolProp.

SAFETY CLASS
A1
Lower toxicity, no flame propagation

GWP, 100-YEAR
10,900 (AR4) · 12,500 (AR6)
IPCC assessment reports

ODP
1
Montreal Protocol

CRITICAL POINT
111.97 °C · 4,136.2 kPa abs
CoolProp, from its equation of state

NORMAL BOILING POINT
−29.75 °C
At 101.325 kPa

	SATURATION PRESSURE			SATURATION PRESSURE			SATURATION PRESSURE	
T (°C)	kPa g	bar g	T (°C)	kPa g	bar g	T (°C)	kPa g	bar g
−70	−89.0	−0.89	−8	133.5	1.34	54	1,231.4	12.31
−68	−87.4	−0.87	−6	150.4	1.50	56	1,292.4	12.92
−66	−85.5	−0.86	−4	168.3	1.68	58	1,355.5	13.55
−64	−83.5	−0.83	−2	187.1	1.87	60	1,420.6	14.21
−62	−81.2	−0.81	0	206.8	2.07	62	1,487.9	14.88
−60	−78.7	−0.79	2	227.6	2.28	64	1,557.3	15.57
−58	−76.0	−0.76	4	249.4	2.49	66	1,628.9	16.29
−56	−73.0	−0.73	6	272.3	2.72	68	1,702.7	17.03
−54	−69.7	−0.70	8	296.2	2.96	70	1,778.9	17.79
−52	−66.1	−0.66	10	321.3	3.21	72	1,857.4	18.57
−50	−62.2	−0.62	12	347.6	3.48	74	1,938.4	19.38
−48	−58.0	−0.58	14	375.1	3.75	76	2,021.7	20.22
−46	−53.4	−0.53	16	403.8	4.04	78	2,107.7	21.08
−44	−48.4	−0.48	18	433.8	4.34	80	2,196.1	21.96
−42	−43.0	−0.43	20	465.1	4.65	82	2,287.3	22.87
−40	−37.2	−0.37	22	497.7	4.98	84	2,381.1	23.81
−38	−31.0	−0.31	24	531.7	5.32	86	2,477.7	24.78
−36	−24.3	−0.24	26	567.1	5.67	88	2,577.1	25.77
−34	−17.1	−0.17	28	604.0	6.04	90	2,679.5	26.79
−32	−9.3	−0.09	30	642.3	6.42	92	2,784.9	27.85
−30	−1.1	−0.01	32	682.2	6.82	94	2,893.3	28.93
−28	7.8	0.08	34	723.6	7.24	96	3,005.0	30.05
−26	17.2	0.17	36	766.6	7.67	98	3,120.1	31.20
−24	27.3	0.27	38	811.2	8.11	100	3,238.5	32.39
−22	38.0	0.38	40	857.5	8.57	102	3,360.7	33.61
−20	49.4	0.49	42	905.5	9.05	104	3,486.7	34.87
−18	61.5	0.61	44	955.2	9.55	106	3,616.8	36.17
−16	74.3	0.74	46	1,006.7	10.07	108	3,751.4	37.51
−14	87.9	0.88	48	1,060.1	10.60	110	3,891.1	38.91
−12	102.3	1.02	50	1,115.3	11.15			
−10	117.5	1.17	52	1,172.4	11.72			

NOTES Gauge pressure is absolute pressure less a standard atmosphere, 101.325 kPa; below it, gauge pressure is negative.

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 and safety class: UNEP RTOC 2018, IPCC AR4 (2007), IPCC AR6 (2021), Montreal Protocol, GHG Protocol (2024).

ONLINE kelvin.engineering/refrigerants/r-12 — this table in kPa absolute, and the P–h diagram
kelvin.engineering/tools/superheat-subcooling?r=r-12 — superheat and subcooling calculator

VERIFY **These figures must be verified by a qualified professional before they're relied on.**