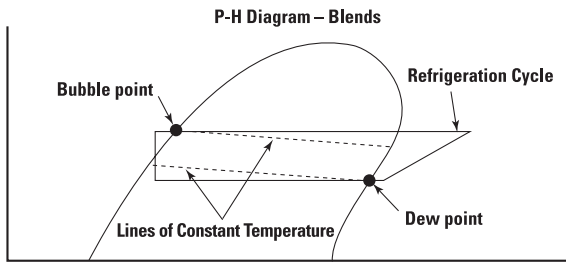




Refrigerants by The Chemours Company

Pressure-Temperature Guide for A/C

Key: **Green** (in of Hg) = Vacuum
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Bold (psig) = Saturated Liquid (calculate subcooling)



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tech2tech@chemours.com **866-433-TECH**
 (8324)



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SAFETY GROUP	Freon™ 410A (R-410A)	Opteon™ XL41 (R-454B)	Freon™ 407C (R-407C)	Freon™ NU-22B™ (R-422B)	Freon™ MO99™ (R-438A)	Freon™ 22 (R-22)	R-32
	A1	A2L	A1	A1	A1	A1	A2L
°F	psig	psig	psig	psig	psig	psig	psig
-50	4.9	3.1	11.0	11.6	11.4	6.1	5.2
-45	7.6	5.6	8.0	8.7	8.5	2.7	8.0
-40	10.7	8.4	4.6	5.5	5.2	0.6	11.0
-35	14.0	11.4	0.9	1.9	1.5	2.6	14.4
-30	17.7	14.8	1.6	1.1	1.2	4.9	18.2
-25	21.8	18.5	3.9	3.2	3.5	7.4	22.3
-20	26.2	22.6	6.5	5.7	5.9	10.2	26.8
-18	28.1	24.3	7.6	6.7	7.0	11.4	28.7
-16	30.0	26.1	8.7	7.8	8.1	12.6	30.7
-14	32.0	27.9	9.9	8.9	9.2	13.9	32.8
-12	34.1	29.8	11.1	10.1	10.4	15.2	34.9
-10	36.3	31.8	12.3	11.3	11.6	16.5	37.1
-8	38.5	33.8	13.7	12.5	12.9	17.9	39.4
-6	40.8	35.9	15.0	13.8	14.2	19.4	41.7
-4	43.2	38.1	16.4	15.2	15.6	20.9	44.2
-2	45.7	40.4	17.9	16.6	17.0	22.4	46.7
0	48.2	42.7	19.4	18.0	18.5	24.0	49.3
2	50.8	45.1	21.0	19.5	20.0	25.7	51.9
4	53.5	47.6	22.6	21.1	21.6	27.4	54.7
6	56.3	50.1	24.3	22.7	23.2	29.2	57.5
8	59.2	52.7	26.1	24.4	24.9	31.0	60.5
10	62.2	55.4	27.9	26.1	26.6	32.8	63.5
12	65.2	58.2	29.8	27.8	28.4	34.8	66.6
14	68.4	61.1	31.7	29.7	30.3	36.8	69.8
16	71.6	64.1	33.7	31.6	32.2	38.8	73.1
18	74.9	67.1	35.7	33.5	34.2	40.9	76.5
20	78.4	70.3	37.9	35.5	36.2	43.1	80.0
22	81.9	73.5	40.1	37.6	38.3	45.3	83.6
24	85.5	76.8	42.3	39.7	40.5	47.6	87.3
26	89.2	80.3	44.7	41.9	42.8	50.0	91.1
28	93.1	83.8	47.1	44.2	45.1	52.4	95.1
30	97.0	87.4	49.6	46.6	47.5	55.0	99.1
32	101.1	91.1	52.1	49.0	49.9	57.5	103.2
34	105.2	94.9	54.8	51.5	52.5	60.2	107.5
36	109.5	98.8	57.5	54.0	55.1	62.9	111.9
38	113.9	102.9	60.3	56.6	57.7	65.7	116.3
40	118.4	107.0	63.2	59.4	60.5	68.6	121.0
42	123.0	111.2	66.1	62.1	63.3	71.5	125.7
44	127.7	115.6	69.2	65.0	66.3	74.5	130.5
46	132.6	120.0	72.3	67.9	69.3	77.6	135.5
48	137.5	124.6	75.5	71.0	72.3	80.8	140.6
50	142.6	129.3	78.8	74.1	75.5	84.1	145.8
52	148.4	140.0	101.7	88.6	94.6	87.4	151.2
54	153.8	145.1	105.6	92.1	98.3	90.8	156.7
56	159.3	150.3	109.6	95.6	102.1	94.4	162.4
58	164.9	155.7	113.7	99.3	105.9	98.0	168.1
60	170.7	161.1	117.9	103.0	109.8	101.6	174.0
65	185.8	175.4	128.9	112.7	120.1	111.2	189.5
70	201.8	190.5	140.5	123.0	131.0	121.4	205.8
75	218.7	206.5	152.8	133.9	142.5	132.2	223.2
80	236.5	223.4	165.8	145.4	154.7	143.6	241.5
82	244.0	230.4	171.2	150.2	159.8	148.4	249.1
84	251.6	237.6	176.8	155.1	165.0	153.2	256.9
86	259.3	244.9	182.4	160.1	170.3	158.2	264.9
88	267.3	252.4	188.2	165.2	175.7	163.2	273.0
90	275.4	260.0	194.1	170.4	181.2	168.4	281.3
92	283.6	267.9	200.1	175.7	186.8	173.7	289.8
94	292.1	275.8	206.3	181.2	192.6	179.1	298.5
96	300.7	284.0	212.5	186.7	198.5	184.6	307.4
98	309.5	292.3	219.0	192.4	204.5	190.2	316.4
100	318.5	300.8	225.5	198.2	210.6	195.9	325.7
102	327.7	309.4	232.2	204.1	216.8	201.8	335.1
104	337.1	318.3	239.0	210.2	223.2	207.7	344.8
106	346.7	327.3	245.9	216.3	229.7	213.8	354.6
108	356.5	336.5	253.0	222.6	236.4	220.0	364.6
110	366.4	345.9	260.3	229.0	243.1	226.4	374.9
112	376.6	355.4	267.6	235.6	250.1	232.8	385.3
114	387.0	365.2	275.1	242.3	257.1	239.4	396.0
116	397.6	375.2	282.8	249.1	264.3	246.1	406.9
118	408.4	385.3	290.6	256.0	271.6	253.0	418.0
120	419.4	395.7	298.6	263.1	279.1	260.0	429.3
122	430.7	406.2	306.7	270.3	286.7	267.1	440.9
124	442.1	417.0	315.0	277.7	294.4	274.3	452.7
126	453.8	427.9	323.4	285.2	302.3	281.7	464.7
128	465.8	439.1	332.0	292.8	310.3	289.2	477.0
130	477.9	450.5	340.7	300.6	318.5	296.9	489.5
135	509.4	479.9	363.3	320.7	339.7	316.7	521.8
140	542.5	510.7	386.9	341.8	361.9	337.4	555.8
150	613.9	576.8	437.5	387.1	409.2	381.7	628.8



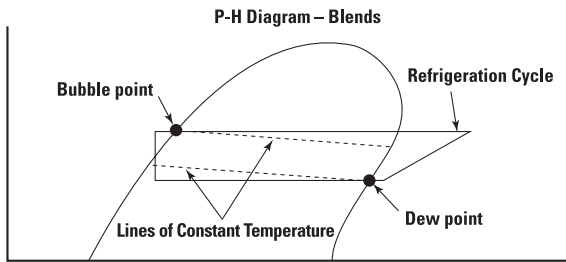
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OPTXLPTAC-2 4/25

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SAFETY GROUP	A1	A2L	A1	A1	A1	A1	A2L
°C	bar_g	bar_g	bar_g	bar_g	bar_g	bar_g	bar_g
-50	0.07	-0.03	-0.51	-0.53	-0.52	-0.37	0.09
-48	0.19	0.08	-0.45	-0.47	-0.46	-0.30	0.20
-46	0.31	0.19	-0.39	-0.41	-0.40	-0.22	0.33
-44	0.44	0.31	-0.32	-0.34	-0.33	-0.14	0.46
-42	0.58	0.44	-0.24	-0.27	-0.26	-0.06	0.61
-40	0.74	0.58	-0.16	-0.19	-0.18	0.04	0.76
-38	0.90	0.73	-0.07	-0.10	-0.09	0.14	0.93
-36	1.08	0.89	0.03	-0.01	0.01	0.25	1.11
-34	1.26	1.06	0.14	0.10	0.11	0.37	1.30
-32	1.47	1.24	0.25	0.20	0.22	0.49	1.50
-30	1.68	1.44	0.37	0.32	0.34	0.63	1.72
-28	1.91	1.65	0.51	0.45	0.47	0.77	1.95
-26	2.15	1.87	0.65	0.58	0.60	0.92	2.20
-24	2.41	2.11	0.80	0.73	0.75	1.08	2.47
-22	2.69	2.36	0.96	0.88	0.91	1.26	2.75
-20	2.98	2.63	1.13	1.05	1.07	1.44	3.04
-18	3.29	2.91	1.32	1.22	1.25	1.63	3.36
-16	3.62	3.21	1.52	1.41	1.44	1.84	3.69
-14	3.96	3.53	1.73	1.61	1.64	2.06	4.05
-12	4.33	3.86	1.95	1.82	1.86	2.29	4.42
-10	4.71	4.21	2.18	2.05	2.09	2.53	4.81
-8	5.12	4.59	2.44	2.28	2.33	2.79	5.23
-6	5.55	4.98	2.70	2.53	2.58	3.06	5.67
-4	6.00	5.39	2.98	2.80	2.85	3.35	6.13
-2	6.47	5.83	3.28	3.08	3.14	3.65	6.61
0	6.97	6.28	3.59	3.38	3.44	3.97	7.12
2	7.49	6.76	3.93	3.69	3.76	4.30	7.65
4	8.04	7.26	4.27	4.02	4.09	4.65	8.21
6	8.61	7.79	4.64	4.36	4.45	5.01	8.80
8	9.21	8.34	5.03	4.73	4.82	5.40	9.41
10	9.87	9.31	6.75	5.88	6.28	5.80	10.06
12	10.53	9.93	7.23	6.30	6.73	6.22	10.73
14	11.22	10.59	7.73	6.74	7.19	6.65	11.43
16	11.93	11.26	8.25	7.21	7.68	7.11	12.17
18	12.68	11.97	8.79	7.69	8.19	7.59	12.93
20	13.46	12.71	9.36	8.19	8.73	8.09	13.73
22	14.28	13.48	9.96	8.71	9.28	8.61	14.57
24	15.12	14.28	10.57	9.26	9.86	9.15	15.44
26	16.01	15.12	11.21	9.83	10.46	9.71	16.34
28	16.93	15.98	11.88	10.42	11.09	10.30	17.28
30	17.88	16.89	12.58	11.04	11.74	10.91	18.26
32	18.87	17.82	13.30	11.68	12.42	11.54	19.28
34	19.91	18.80	14.05	12.34	13.12	12.20	20.34
36	20.98	19.81	14.83	13.03	13.85	12.88	21.44
38	22.09	20.86	15.64	13.75	14.61	13.59	22.58
40	23.24	21.94	16.48	14.49	15.39	14.32	23.77
42	24.44	23.07	17.35	15.26	16.21	15.08	25.00
44	25.68	24.24	18.25	16.06	17.05	15.87	26.28
46	26.97	25.45	19.18	16.89	17.92	16.69	27.60
48	28.31	26.71	20.15	17.75	18.83	17.54	28.98
50	29.69	28.01	21.15	18.64	19.76	18.41	30.40
52	31.13	29.35	22.18	19.56	20.73	19.32	31.87
54	32.61	30.74	23.25	20.51	21.74	20.26	33.40
56	34.15	32.18	24.36	21.50	22.77	21.23	34.98
58	35.75	33.67	25.50	22.51	23.84	22.23	36.62
60	37.41	35.21	26.68	23.57	24.95	23.26	38.32
62	39.12	36.81	27.90	24.66	26.09	24.33	40.08
64	40.90	38.45	29.16	25.78	27.27	25.43	41.90
66	42.74	40.15	30.46	26.95	28.49	26.57	43.78