

Table 2 Refrigerant 11 (Trichloromonofluoromethane) Properties of Superheated Vapor*

Refrigerant Properties of R-134a Saturated Vapor																
Temp F	Abs Pressure 1.0 psi Gage Pressure -27.8 in. Vac (Sat Temp -31.0 F)			Abs Pressure 2.0 psi Gage Pressure -25.8 in. Vac (Sat Temp -8.6 F)			Abs Pressure 3.0 psi Gage Pressure -23.8 in. Vac (Sat Temp 5.9 F)			Abs Pressure 4.0 psi Gage Pressure -21.8 in. Vac (Sat Temp 16.8 F)			Abs Pressure 5.0 psi Gage Pressure -19.7 in. Vac (Sat Temp 25.7 F)			
	t	v	h	t	v	h	t	v	h	t	v	h	t	v	h	
(At Sat)	(33.39)	(89.62)	(0.2098)	(17.50)	(91.36)	(0.2030)	(13.01)	(93.14)	(0.2011)	(9.196)	(94.50)	(0.1990)	(7.478)	(96.61)	(0.1960)	
-40	33.44	88.74	0.2070	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
-30	34.22	89.28	0.2059	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
-20	35.01	91.34	0.2127	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
0	35.80	92.95	0.2155	17.54	92.45	0.2054	.....	.....	.....	.....	.....	.....	.....	.....	.....	
10	36.68	93.78	0.2182	18.23	93.45	0.2081	12.12	93.67	0.2022	.....	.....	.....	.....	.....	.....	
20	37.57	95.07	0.2210	18.63	95.02	0.2102	12.38	94.96	0.2050	.....	.....	.....	.....	.....	.....	
30	38.45	96.35	0.2237	19.02	96.32	0.2136	12.63	96.28	0.2077	9.458	96.22	0.2035	.....	.....	.....	
40	39.34	97.63	0.2264	19.42	97.64	0.2163	12.91	97.59	0.2104	9.657	97.54	0.2061	7.545	96.17	0.2002	
50	39.72	99.02	0.2290	19.81	98.97	0.2182	13.17	98.93	0.2130	9.856	98.87	0.2088	7.864	98.82	0.2055	
60	40.51	100.35	0.2317	20.20	100.32	0.2216	13.44	100.27	0.2157	10.05	100.22	0.2115	8.024	100.17	0.2082	
70	41.29	101.71	0.2343	20.60	101.67	0.2243	13.70	101.62	0.2183	10.25	101.57	0.2141	8.183	101.53	0.2108	
80	42.07	103.08	0.2368	20.99	103.04	0.2267	13.96	103.00	0.2208	10.45	102.94	0.2166	8.342	102.90	0.2133	
90	42.86	104.45	0.2393	21.39	104.41	0.2293	14.23	104.36	0.2233	10.65	104.32	0.2191	8.501	104.27	0.2158	
100	43.64	105.83	0.2418	21.78	105.79	0.2317	14.49	105.74	0.2258	10.85	105.70	0.2226	8.661	105.66	0.2183	
110	44.43	107.23	0.2442	22.17	107.19	0.2343	14.75	107.15	0.2284	11.05	107.10	0.2254	8.820	107.06	0.2208	
120	45.21	108.63	0.2468	22.57	108.59	0.2368	15.02	108.55	0.2306	11.25	108.51	0.2282	8.979	108.47	0.2234	
130	46.00	110.05	0.2492	22.96	110.01	0.2392	15.28	109.97	0.2333	11.44	109.93	0.2309	9.138	109.89	0.2258	
140	46.78	111.48	0.2516	23.35	111.44	0.2416	15.54	111.40	0.2357	11.64	111.36	0.2334	9.296	111.32	0.2282	
150	47.56	112.91	0.2540	23.75	112.87	0.2439	15.81	112.83	0.2380	11.84	112.79	0.2359	9.455	112.75	0.2306	
160	48.35	114.34	0.2564	24.14	114.30	0.2463	16.07	114.26	0.2404	12.03	114.22	0.2382	9.613	114.21	0.2330	
170	49.13	115.81	0.2588	24.53	115.77	0.2487	16.33	115.73	0.2428	12.23	115.69	0.2406	9.771	115.66	0.2353	
180	49.91	117.27	0.2611	24.92	117.23	0.2510	16.59	117.19	0.2451	12.43	117.15	0.2429	9.930	117.12	0.2376	
190	50.70	118.74	0.2635	25.32	118.71	0.2533	16.86	118.67	0.2474	12.63	118.64	0.2452	10.09	118.60	0.2399	
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Temp F	Abs Pressure 6.0 psi Gage Pressure 17.7 in. Vac (Sat Temp 33.2 F)			Abs Pressure 7.0 psi Gage Pressure 15.67 in. Vac (Sat Temp 39.8 F)			Abs Pressure 8.0 psi Gage Pressure 13.64 in. Vac (Sat Temp 45.7 F)			Abs Pressure 9.0 psi Gage Pressure 11.60 in. Vac (Sat Temp 51.0 F)			Abs Pressure 10.0 psi Gage Pressure 9.56 in. Vac (Sat Temp 55.6 F)			
	t	v	h	t	v	h	t	v	h	t	v	h	t	v	h	
(At Sat)	(6.312)	(96.54)	(0.1984)	(6.473)	(97.37)	(0.1978)	(6.634)	(98.09)	(0.1974)	(6.795)	(98.76)	(0.1971)	(6.956)	(99.37)	(0.1968)	
40	6.408	97.44	0.2002	6.473	97.37	0.1978	6.473	97.37	0.1978	6.473	97.37	0.1978	6.473	97.37	0.1978	
50	6.537	98.77	0.2026	6.538	98.72	0.2003	6.538	98.72	0.2003	6.538	98.72	0.2003	6.538	98.72	0.2003	
60	6.670	100.12	0.2050	6.603	100.07	0.2027	6.603	100.07	0.2027	6.603	100.07	0.2027	6.603	100.07	0.2027	
70	6.807	101.43	0.2074	6.668	101.40	0.2051	6.668	101.40	0.2051	6.668	101.40	0.2051	6.668	101.40	0.2051	
80	6.947	102.76	0.2098	6.733	102.73	0.2075	6.733	102.73	0.2075	6.733	102.73	0.2075	6.733	102.73	0.2075	
90	7.070	104.23	0.2126	6.847	104.15	0.2109	6.847	104.15	0.2109	6.847	104.15	0.2109	6.847	104.15	0.2109	
100	7.203	105.61	0.2157	6.962	105.57	0.2134	6.962	105.57	0.2134	6.962	105.57	0.2134	6.962	105.57	0.2134	
110	7.336	107.03	0.2187	7.077	107.00	0.2159	7.077	107.00	0.2159	7.077	107.00	0.2159	7.077	107.00	0.2159	
120	7.469	108.42	0.2207	7.191	108.39	0.2183	7.191	108.39	0.2183	7.191	108.39	0.2183	7.191	108.39	0.2183	
130	7.602	109.85	0.2227	7.305	109.81	0.2208	7.305	109.81	0.2208	7.305	109.81	0.2208	7.305	109.81	0.2208	
140	7.735	111.28	0.2247	7.419	111.24	0.2232	7.419	111.24	0.2232	7.419	111.24	0.2232	7.419	111.24	0.2232	
150	7.867	112.71	0.2270	7.533	112.67	0.2256	7.533	112.67	0.2256	7.533	112.67	0.2256	7.533	112.67	0.2256	
160	8.000	114.17	0.2293	7.647	114.13	0.2280	7.647	114.13	0.2280	7.647	114.13	0.2280	7.647	114.13	0.2280	
170	8.132	115.62	0.2317	7.760	115.58	0.2304	7.760	115.58	0.2304	7.760	115.58	0.2304	7.760	115.58	0.2304	
180	8.265	117.07	0.2340	7.874	117.03	0.2328	7.874	117.03	0.2328	7.874	117.03	0.2328	7.874	117.03	0.2328	
190	8.397	118.57	0.2363	7.988	118.53	0.2350	7.988	118.53	0.2350	7.988	118.53	0.2350	7.988	118.53	0.2350	
200	8.529	120.05	0.2385	8.102	120.01	0.2372	8.102	120.01	0.2372	8.102	120.01	0.2372	8.102	120.01	0.2372	
210	8.661	121.54	0.2411	8.216	121.50	0.2395	8.216	121.50	0.2395	8.216	121.50	0.2395	8.216	121.50	0.2395	
220	8.794	123.03	0.2436	8.330	123.00	0.2417	8.330	123.00	0.2417	8.330	123.00	0.2417	8.330	123.00	0.2417	
230	8.926	124.51	0.2462	8.444	124.47	0.2439	8.444	124.47	0.2439	8.444	124.47	0.2439	8.444	124.47	0.2439	
240	9.058	126.00	0.2488	8.558	125.96	0.2461	8.558	125.96	0.2461	8.558	125.96	0.2461	8.558	125.96	0.2461	
250	9.189	127.58	0.2505	8.672	127.54	0.2482	8.672	127.54	0.2482	8.672	127.54	0.2482	8.672	127.54	0.2482	
260	9.321	129.13	0.2526	8.786	129.09	0.2504	8.786	129.09	0.2504	8.786	129.09	0.2504	8.786	129.09	0.2504	
270	9.453	130.68	0.2547	8.900	130.64	0.2526	8.900	130.64	0.2526	8.900	130.64	0.2526	8.900	130.64	0.2526	
280	9.585	132.23	0.2568	9.014	132.19	0.2547	9.014	132.19	0.2547	9.014	132.19	0.2547	9.014	132.19	0.2547	
290	9.717	133.78	0.2589	9.128	133.74	0.2568	9.128	133.74	0.2568	9.128	133.74	0.2568	9.128	133.74	0.2568	
300	9.849	135.33	0.2610	9.242	135.29	0.2589	9.242	135.29	0.2589	9.242	135.29	0.2589	9.242	135.29	0.2589	
310	9.981	136.88	0.2631	9.356	136.84	0.2610	9.356	136.84	0.2610	9.356	136.84	0.2610	9.356	136.84	0.2610	
320	10.113	138.43	0.2652	9.470	138.39	0.2631	9.470	138.39	0.2631	9.470	138.39	0.2631	9.470	138.39	0.2631	
330	10.245	140.00	0.2673	9.584	140.00	0.2652	9.584	140.00	0.2652	9.584	140.00	0.2652	9.584	140.00	0.2652	
340	10.377	141.57	0.2694	9.698	141.53	0.2673	9.698	141.53	0.2673	9.698	141.53	0.2673	9.698	141.53	0.2673	
350	10.509	143.14	0.2715	9.812	143.10	0.2694	9.812	143.10	0.2694	9.812	143.10	0.2694	9.812	143.10	0.2694	
360	10.641	144.71	0.2736	9.926	144.67	0.2715	9.926	144.67	0.2715	9.926	144.67	0.2715	9.926	144.67	0.2715	
370	10.773	146.28	0.2757	10.040	146.24	0.2736	10.040	146.24	0.2736	10.040	146.24	0.2736	10.040	146.24	0.2736	
380	10.905	147.85	0.2778	10.154	147.81	0.2757	10.154	147.81	0.2757	10.154	147.81	0.2757	10.154	147.81	0.2757	
390	11.037	149.42	0.2799	10.268	149.38	0.2778	10.268	149.38	0.2778	10.268	149.38	0.2778	10.268	149.38	0.2778	
400	11.169	150.99	0.2820	10.382	150.95	0.2799	10.382	150.95	0.2799	10.382	150.95	0.2799	10.382	150.95	0.2799	
410	11.301	152.56	0.2841	10.496	152.52	0.2820	10.496	152.52	0.2820	10.496	152.52	0.2820	10.496	152.52	0.2820	
420	11.433	154.13	0.2862	10.610	154.09	0.2841	10.610	154.09	0.2841	10.610	154.09	0.2841	10.610	154.09	0.2841	
430	11.565	155.70	0.2883	10.724	155.66	0.2862	10.724	155.66	0.2862	10.724	155.66	0.2862	10.724	155.66	0.2862	
440	11.697	157.27	0.2904	10.838	157.23	0.2883	10.838	157.23	0.2883	10.838	157.23	0.2883	10.838	157.23	0.2883	
450	11.829	158.84	0.2925	10.952	158.79	0.2904	10.952	158.79	0.2904	10.952	158.79	0.2904	10.952	158.79		