



ParaFlow™ and IsoFlow™

Absorption Liquid Chillers

Useful Conversion Formulas

To convert °C (Centigrade) to °F (Fahrenheit) or °F to °C:

$$^{\circ}\text{C} = \frac{^{\circ}\text{F} + 40}{1.8} - 40 \quad ^{\circ}\text{F} = (^{\circ}\text{C} + 40) \times 1.8 - 40$$

1 atm (atmosphere at sea level) = 14.696 psia = 0 psig = 760 mmHg = 29.92 in Hg

1 mm Hg = 1000 microns = 0.3937 inch Hg = .01934 psi

1 in Hg = 25.4 mm Hg = .491 psi

1 psi = 2.036 in Hg = 51.7 mm Hg = 2.31 ft H₂O

1 ft H₂O = .433 psi

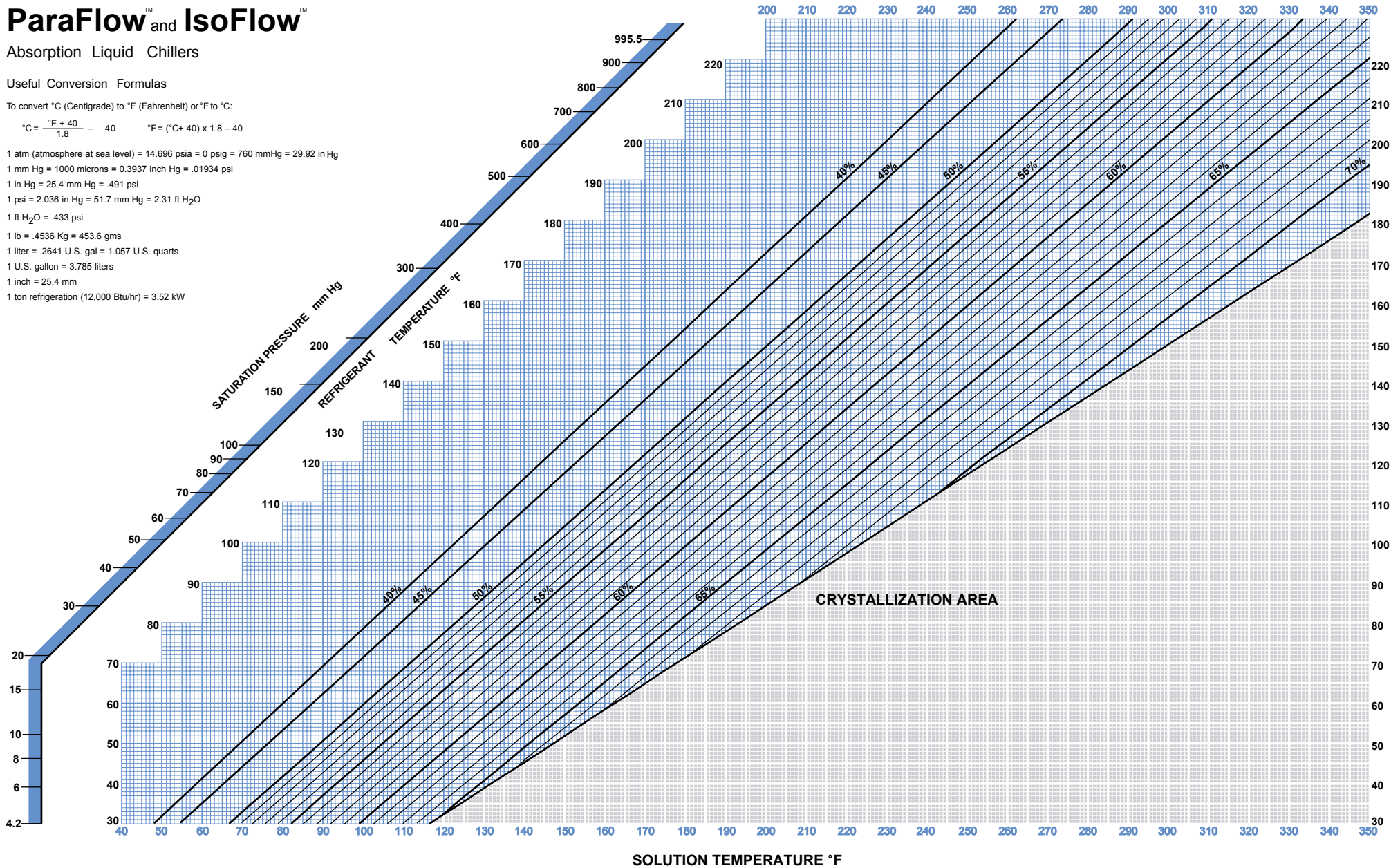
1 lb = .4536 Kg = 453.6 gms

1 liter = .2641 U.S. gal = 1.057 U.S. quarts

1 U.S. gallon = 3.785 liters

1 inch = 25.4 mm

1 ton refrigeration (12,000 Btu/hr) = 3.52 kW



SPECIFIC GRAVITY - CONCENTRATION TABLES AQUEOUS LiBr SOLUTIONS

Refrigerant Table (%LiBr by Weight) Temperature °F

S.G.	40	45	50	55	60	65	70	75	80	85	90	95	100
1.00	—	—	—	—	—	—	0.08	0.18	0.28	0.37	0.47	0.57	0.67
1.01	0.98	1.08	1.17	1.27	1.37	1.47	1.56	1.66	1.76	1.85	1.95	2.05	2.15
1.02	2.43	2.52	2.62	2.72	2.82	2.91	3.01	3.11	3.20	3.30	3.40	3.50	3.59
1.03	3.84	3.94	4.03	4.13	4.23	4.33	4.42	4.52	4.62	4.72	4.81	4.91	5.01
1.04	5.22	5.32	5.42	5.51	5.61	5.71	5.81	5.90	6.00	6.10	6.19	6.29	6.39
1.05	6.57	6.67	6.77	6.87	6.96	7.06	7.16	7.26	7.35	7.45	7.55	7.64	7.74

Solution Tables Temperature °F

S.G.	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
1.350	37.27	37.5	37.75	37.98	38.21	38.44	38.67	38.90	39.13	39.35	39.58	39.80	40.02	40.24	40.46	40.68	40.90	41.11	41.33
1.360	38.03	38.26	38.50	38.73	38.96	39.19	39.42	39.64	39.87	40.09	40.31	40.53	40.75	40.97	41.19	41.41	41.62	41.83	42.05
1.370	38.78	39.01	39.24	39.47	39.70	39.93	40.15	40.38	40.60	40.82	41.04	41.26	41.48	41.69	41.91	42.12	42.34	42.55	42.76
1.380	39.52	39.75	39.98	40.20	40.43	40.66	40.88	41.10	41.32	41.54	41.76	41.98	42.20	42.41	42.62	42.83	43.04	43.25	43.46
1.390	40.25	40.48	40.70	40.93	41.16	41.38	41.60	41.82	42.04	42.26	42.48	42.69	42.90	43.12	43.33	43.54	43.75	43.95	44.16
1.400	40.97	41.20	41.42	41.65	41.87	42.09	42.31	42.53	42.75	42.97	43.18	43.39	43.61	43.82	44.03	44.23	44.44	44.64	44.85
1.410	41.69	41.91	42.14	42.36	42.58	42.80	43.02	43.24	43.45	43.67	43.88	44.09	44.30	44.51	44.72	44.92	45.12	45.33	45.53
1.420	42.39	42.62	42.84	43.06	43.28	43.50	43.72	43.93	44.15	44.36	44.57	44.78	44.99	45.19	45.40	45.60	45.80	46.00	46.20
1.430	43.10	43.32	43.54	43.76	43.98	44.19	44.41	44.62	44.83	45.04	45.25	45.46	45.67	45.87	46.07	46.27	46.47	46.67	46.87
1.440	43.79	44.01	44.23	44.45	44.66	44.88	45.09	45.30	45.51	45.72	45.93	46.13	46.34	46.54	46.74	46.94	47.14	47.33	47.53
1.450	44.47	44.69	44.91	45.13	45.34	45.55	45.76	45.97	46.18	46.39	46.59	46.80	47.00	47.20	47.40	47.60	47.79	47.99	48.18
1.460	45.15	45.37	45.58	45.80	46.01	46.22	46.43	46.6	46.85	47.05	47.25	47.46	47.66	47.85	48.05	48.25	48.44	48.63	48.82
1.470	45.82	46.03	46.25	46.46	46.67	46.88	47.09	47.30	47.50	47.70	47.91	48.11	48.30	48.50	48.70	48.89	49.08	49.27	49.46
1.480	46.48	46.69	46.91	47.12	47.33	47.54	47.74	47.95	48.15	48.35	48.55	48.75	48.94	49.14	49.33	49.52	49.71	49.90	50.09
1.490	47.13	47.35	47.56	47.77	47.97	48.18	48.38	48.59	48.79	48.99	49.19	49.38	49.58	49.77	49.96	50.15	50.34	50.53	50.71
1.500	47.78	47.99	48.20	48.41	48.61	48.82	49.02	49.22	49.42	49.62	49.82	50.01	50.20	50.39	50.58	50.77	50.96	51.14	51.33
1.510	48.42	48.63	48.84	49.04	49.25	49.45	49.65	49.85	50.05	50.24	50.44	50.63	50.82	51.01	51.20	51.38	51.57	51.75	51.93
1.520	49.05	49.26	49.46	49.67	49.87	50.07	50.27	50.47	50.66	50.86	51.05	51.24	51.43	51.62	51.80	51.99	52.17	52.35	52.53
1.530	49.67	49.88	50.08	50.28	50.49	50.68	50.88	51.08	51.27	51.46	51.66	51.84	52.03	52.22	52.40	52.59	52.77	52.95	53.12
1.540	50.29	50.49	50.69	50.89	51.09	51.29	51.49	51.68	51.87	52.06	52.25	52.44	52.63	52.81	52.99	53.18	53.36	53.53	53.71
1.550	50.89	51.10	51.30	51.50	51.69	51.89	52.08	52.28	52.47	52.66	52.84	53.03	53.21	53.40	53.58	53.76	53.94	54.11	54.29
1.560	51.49	51.69	51.89	52.09	52.29	52.48	52.67	52.86	53.05	53.24	53.43	53.61	53.79	53.97	54.15	54.33	54.51	54.68	54.86
1.570	52.09	52.28	52.48	52.68	52.87	53.06	53.25	53.44	53.6	353.82	54.00	54.18	54.37	54.55	54.72	54.90	55.07	55.25	55.42
1.580	52.67	52.87	53.06	53.26	53.45	53.64	53.83	54.02	54.20	54.39	54.57	54.75	54.93	55.11	55.28	55.46	55.63	55.80	55.97
1.590	53.25	53.44	53.64	53.83	54.02	54.21	54.39	54.58	54.77	54.95	55.13	55.31	55.49	55.66	55.84	56.01	56.18	56.35	56.52
1.600	53.81	54.01	54.20	54.39	54.58	54.77	54.95	55.14	55.32	55.50	55.68	55.86	56.04	56.21	56.38	56.55	56.72	56.89	57.06
1.610	54.37	54.57	54.76	54.95	55.13	55.32	55.50	55.69	55.87	56.05	56.23	56.40	56.58	56.75	56.92	57.09	57.26	57.43	57.59
1.620	54.93	55.12	55.31	55.49	55.68	55.86	56.05	56.23	56.41	56.59	56.76	56.94	57.11	57.28	57.45	57.62	57.79	57.95	58.12
1.630	55.47	55.66	55.85	56.03	56.22	56.40	56.58	56.76	56.94	57.12	57.29	57.46	57.64	57.81	57.97	58.14	58.31	58.47	58.63
1.640	56.01	56.20	56.38	56.57	56.75	56.93	57.11	57.29	57.46	57.64	57.81	57.98	58.15	58.32	58.49	58.66	58.82	58.98	59.14
1.650	56.54	56.72	56.91	57.09	57.27	57.45	57.63	57.81	57.98	58.15	58.33	58.50	58.67	58.83	59.00	59.16	59.32	59.49	59.65
1.660	57.06	57.25	57.43	57.61	57.79	57.97	58.14	58.32	58.49	58.66	58.83	59.00	59.17	59.33	59.50	59.66	59.82	59.98	60.14
1.670	57.58	57.76	57.94	58.12	58.29	58.47	58.65	58.82	58.99	59.16	59.33	59.50	59.66	59.83	59.99	60.15	60.31	60.47	60.63
1.680	58.08	58.26	58.44	58.62	58.79	58.97	59.14	59.31	59.48	59.65	59.82	59.99	60.15	60.31	60.48	60.64	60.79	60.95	61.11
1.690	58.58	58.76	58.94	59.11	59.29	59.46	59.63	59.80	59.97	60.14	60.30	60.47	60.63	60.79	60.95	61.11	61.27	61.43	61.58
1.700	59.07	59.25	59.42	59.60	59.77	59.94	60.11	60.28	60.45	60.61	60.78	60.94	61.10	61.26	61.42	61.58	61.74	61.89	62.05
1.710	59.55	59.73	59.90	60.08	60.25	60.42	60.59	60.75	60.92	61.08	61.25	61.41	61.57	61.73	61.89	62.04	62.20	62.35	62.50
1.720		60.20	60.38	60.55	60.72	60.88	61.05	61.22	61.38	61.54	61.71	61.87	62.03	62.18	62.34	62.50	62.65	62.80	62.95
1.730		60.67	60.84	61.01	61.18	61.34	61.51	61.67	61.84	62.00	62.16	62.32	62.48	62.63	62.79	62.94	63.09	63.25	63.40
1.740		61.13	61.30	61.46	61.63	61.80	61.96	62.12	62.28	62.44	62.60	62.76	62.92	63.07	63.23	63.38	63.53	63.68	63.83
1.750			61.74	61.91	62.08	62.24	62.40	62.56	62.72	62.88	63.04	63.20	63.35	63.51	63.66	63.81	63.96	64.11	64.26
1.760				62.35	62.51	62.68	62.84	63.00	63.16	63.31	63.47	63.62	63.78	63.93	64.08	64.23	64.38	64.53	64.68
1.770				62.78	62.94	63.10	63.26	63.42	63.58	63.74	63.89	64.04	64.20	64.35	64.50	64.65	64.80	64.95	65.09
1.780					63.37	63.52	63.68	63.84	64.00	64.15	64.30	64.46	64.61	64.76	64.91	65.06	65.21	65.35	65.50
1.790					63.78	63.94	64.09	64.25	64.40	64.56	64.71	64.86	65.01	65.16	65.31	65.46	65.60	65.75	65.89
1.800						64.34	64.50	64.65	64.81	64.96	65.11	65.26	65.41	65.56	65.70	65.85	66.00	66.14	66.28
1.810							64.89	65.05	65.20	65.35	65.50	65.65	65.80	65.94	66.09	66.24	66.38	66.52	66.67
1.820								65.43	65.58	65.73	65.88	66.03	66.18	66.32	66.47	66.61	66.76	66.90	67.04
1.830									65.96	66.11	66.26	66.41	66.55	66.70	66.84	66.98	67.13	67.27	67.41
1.840										66.48	66.63	66.77	66.92	67.06	67.20	67.35	67.49	67.63	67.77
1.850											66.99	67.13	67.27	67.42	67.56	67.70	67.84	67.98	68.12

CRYSTALLIZATION AREA