

PROPERTY VS. TEMPERATURE CHART: DURATHERM S - STANDARD

TEMPERATURE (Fahrenheit)	DENSITY (lb/ft ³)	KINEMATIC VISCOSITY (Centistoke)	DYNAMIC VISCOSITY (Centipoise)	THERMAL CONDUCTIVITY (BTU/hr-F-ft)	HEAT CAPACITY (BTU/lb.F)	VAPOUR PRESSURE (Psia)
-58	8.34	334.25	334.20	0.084	0.371	0.00
-40	8.32	287.80	287.03	0.083	0.373	0.00
-30	8.30	241.34	240.10	0.083	0.375	0.00
-20	8.28	194.89	193.40	0.082	0.377	0.00
-10	8.26	136.74	135.36	0.082	0.380	0.00
0	8.24	125.06	123.48	0.081	0.382	0.00
5	8.22	113.37	111.66	0.081	0.384	0.00
10	8.20	106.40	104.52	0.080	0.386	0.00
20	8.18	99.42	97.42	0.080	0.387	0.00
30	8.16	92.45	90.36	0.079	0.389	0.00
32	8.14	85.47	83.33	0.079	0.391	0.00
40	8.12	78.50	76.33	0.078	0.393	0.00
50	8.09	71.67	69.51	0.078	0.394	0.00
60	8.07	64.83	62.72	0.077	0.396	0.00
70	8.05	58.00	55.96	0.077	0.398	0.00
80	8.03	51.17	49.24	0.076	0.400	0.00
90	8.01	44.33	42.56	0.076	0.401	0.00
100	7.99	37.50	35.90	0.075	0.403	0.00
110	7.97	35.72	34.11	0.074	0.405	0.00
120	7.95	33.93	32.32	0.074	0.407	0.00
130	7.93	32.15	30.54	0.073	0.410	0.00
140	7.91	30.37	28.77	0.072	0.412	0.00
150	7.89	28.58	27.01	0.072	0.414	0.00
160	7.86	26.80	25.26	0.071	0.416	0.00
170	7.84	25.02	23.51	0.070	0.418	0.00
180	7.82	23.23	21.78	0.070	0.421	0.10
190	7.80	21.45	20.05	0.069	0.423	0.43
200	7.78	19.67	18.34	0.068	0.425	0.65
210	7.76	17.88	16.63	0.068	0.427	0.68
220	7.72	15.70	14.52	0.066	0.431	0.72
230	7.70	15.30	14.11	0.066	0.434	0.76
240	7.68	14.90	13.70	0.065	0.436	0.80
250	7.66	14.49	13.30	0.064	0.438	0.84
260	7.64	14.09	12.89	0.064	0.440	0.88
270	7.61	13.69	12.49	0.063	0.442	0.93
280	7.59	13.29	12.09	0.062	0.445	0.98
290	7.57	12.89	11.70	0.062	0.447	1.03
300	7.55	12.49	11.30	0.061	0.449	1.08
310	7.53	12.09	10.91	0.060	0.451	1.12
320	7.51	11.68	10.52	0.060	0.454	1.17
330	7.49	11.28	10.13	0.059	0.456	1.22
340	7.47	10.88	9.74	0.058	0.458	1.26
350	7.45	10.48	9.35	0.058	0.461	1.31
360	7.43	10.08	8.97	0.057	0.463	1.37
370	7.41	9.68	8.59	0.056	0.465	1.42
380	7.39	9.28	8.21	0.056	0.467	1.48
390	7.36	8.88	7.83	0.055	0.470	1.54
400	7.34	8.47	7.46	0.055	0.472	1.60
410	7.32	8.07	7.08	0.054	0.474	1.66
420	7.30	7.67	6.71	0.053	0.477	1.71
430	7.28	7.27	6.34	0.053	0.479	1.77
440	7.26	6.87	5.98	0.052	0.481	1.82
450	7.24	6.47	5.61	0.051	0.484	1.88
460	7.22	6.07	5.25	0.051	0.486	1.93
470	7.20	5.66	4.89	0.050	0.488	1.99
480	7.18	5.26	4.53	0.049	0.490	2.04
490	7.16	4.86	4.17	0.049	0.493	2.10
500	7.14	4.46	3.81	0.048	0.495	2.15
510	7.11	4.35	3.71	0.047	0.497	2.21
520	7.09	4.24	3.61	0.047	0.500	2.26
530	7.07	4.13	3.50	0.046	0.502	2.32
540	7.05	4.02	3.40	0.046	0.504	2.37
550	7.03	3.92	3.30	0.045	0.507	2.43
560	7.01	3.81	3.20	0.044	0.509	2.48
570	6.99	3.70	3.10	0.044	0.511	2.54
580	6.97	3.59	3.00	0.043	0.513	2.59
590	6.95	3.48	2.90	0.043	0.516	2.65
600	6.93	3.37	2.80	0.042	0.518	2.70
610	6.91	3.26	2.70	0.041	0.520	3.03
620	6.89	3.15	2.60	0.041	0.523	3.36
630	6.86	3.04	2.50	0.040	0.525	3.69
640	6.84	2.93	2.41	0.040	0.527	4.98
650	6.82	2.83	2.31	0.039	0.530	5.95

PROPERTY VS. TEMPERATURE CHART: DURATHERM S - METRIC

TEMPERATURE (Celsius)	DENSITY (kg/m ³)	KINEMATIC VISCOSITY (Centistoke)	DYNAMIC VISCOSITY (Centipoise)	THERMAL CONDUCTIVITY (W/m.K)	HEAT CAPACITY (kJ/kg.K)	VAPOR PRESSURE (kPa)
-50	999.85	334.25	334.20	0.145	1.551	0.00
-40	997.36	287.80	287.03	0.144	1.561	0.00
-34	994.86	241.34	240.10	0.143	1.570	0.00
-29	992.36	194.89	193.40	0.142	1.580	0.00
-23	989.87	136.74	135.36	0.141	1.590	0.00
-18	987.37	125.06	123.48	0.140	1.599	0.00
-15	984.87	113.37	111.66	0.139	1.607	0.00
-12	982.38	106.40	104.52	0.138	1.614	0.00
-7	979.88	99.42	97.42	0.138	1.621	0.00
-1	977.38	92.45	90.36	0.137	1.629	0.00
0	974.89	85.47	83.33	0.136	1.636	0.00
4	972.39	78.50	76.33	0.135	1.643	0.00
10	969.90	71.67	69.51	0.134	1.651	0.00
16	967.40	64.83	62.72	0.133	1.658	0.00
21	964.90	58.00	55.96	0.132	1.665	0.00
27	962.41	51.17	49.24	0.132	1.673	0.00
32	959.91	44.33	42.56	0.131	1.680	0.00
38	957.41	37.50	35.90	0.130	1.687	0.00
43	954.92	35.72	34.11	0.129	1.696	0.00
49	952.42	33.93	32.32	0.127	1.706	0.00
54	949.92	32.15	30.54	0.126	1.715	0.00
60	947.43	30.37	28.77	0.125	1.724	0.00
66	944.93	28.58	27.01	0.124	1.733	0.00
71	942.43	26.80	25.26	0.123	1.742	0.00
77	939.94	25.02	23.51	0.122	1.751	0.00
82	937.44	23.23	21.78	0.121	1.761	0.69
88	934.95	21.45	20.05	0.119	1.770	2.96
93	932.45	19.67	18.34	0.118	1.779	4.48
99	929.95	17.88	16.63	0.117	1.788	4.72
104	924.96	15.70	14.52	0.115	1.807	4.96
110	922.46	15.30	14.11	0.114	1.816	5.22
116	919.97	14.90	13.70	0.112	1.825	5.49
121	917.47	14.49	13.30	0.111	1.834	5.78
127	914.97	14.09	12.89	0.110	1.843	6.08
132	912.48	13.69	12.49	0.109	1.852	6.39
138	909.98	13.29	12.09	0.108	1.862	6.73
143	907.48	12.89	11.70	0.107	1.871	7.08
149	904.99	12.49	11.30	0.106	1.880	7.45
154	902.49	12.09	10.91	0.104	1.890	7.74
160	900.00	11.68	10.52	0.103	1.899	8.06
166	897.50	11.28	10.13	0.102	1.909	8.38
171	895.00	10.88	9.74	0.101	1.918	8.71
177	892.51	10.48	9.35	0.100	1.928	9.06
182	890.01	10.08	8.97	0.099	1.938	9.43
188	887.51	9.68	8.59	0.098	1.947	9.80
193	885.02	9.28	8.21	0.097	1.957	10.20
199	882.52	8.88	7.83	0.095	1.967	10.61
204	880.02	8.47	7.46	0.094	1.976	11.03
210	877.53	8.07	7.08	0.093	1.986	11.41
216	875.03	7.67	6.71	0.092	1.995	11.79
221	872.54	7.27	6.34	0.091	2.005	12.17
227	870.04	6.87	5.98	0.090	2.015	12.55
232	867.54	6.47	5.61	0.089	2.024	12.93
238	865.05	6.07	5.25	0.088	2.034	13.31
243	862.55	5.66	4.89	0.086	2.044	13.69
249	860.05	5.26	4.53	0.085	2.053	14.07
254	857.56	4.86	4.17	0.084	2.063	14.44
260	855.06	4.46	3.81	0.083	2.072	14.82
266	852.56	4.35	3.71	0.082	2.082	15.20
271	850.07	4.24	3.61	0.081	2.092	15.58
277	847.57	4.13	3.50	0.080	2.101	15.96
282	845.07	4.02	3.40	0.079	2.111	16.34
288	842.58	3.92	3.30	0.078	2.121	16.72
293	840.08	3.81	3.20	0.077	2.130	17.10
299	837.59	3.70	3.10	0.076	2.140	17.48
304	835.09	3.59	3.00	0.075	2.150	17.86
310	832.59	3.48	2.90	0.074	2.159	18.24
316	830.10	3.37	2.80	0.073	2.169	18.62
321	827.60	3.26	2.70	0.072	2.178	20.89
327	825.10	3.15	2.60	0.071	2.188	23.17
332	822.61	3.04	2.50	0.070	2.198	25.44
338	819.61	2.93	2.40	0.069	2.207	34.34
343	817.62	2.83	2.31	0.067	2.217	41.02