

**XCEL THERM® MK1 Engineering Properties\***

**Radco** Industries

VAPOR PHASE*												
Temperature		Viscosity	Density		Specific Heat		Thermal Conductivity		Latent Heat Vap		Enthalpy <sup>1</sup>	
°F	°C		cP	lb/ft3	kg/m3	BTU/lb-°F	J/g-K	BTU/ft-hr-°F	W/m-K	BTU/lb	J/g	BTU/lb
53.6	12	0.00571	-	-	0.2331	0.98	0.0103	0.0178	180.1	419	180.1	418.6
60	16	0.00577	-	-	0.2361	0.99	0.0103	0.0178	179.3	417	181.6	422.1
80	27	0.00598	-	-	0.2443	1.02	0.0103	0.0178	176.8	411	186.5	433.5
100	38	0.00619	-	-	0.2525	1.06	0.0104	0.018	174.2	405	191.5	445.1
105	41	0.00625	-	-	0.2545	1.07	0.0104	0.018	173.6	403	192.8	448.1
110	43	0.0063	-	-	0.2566	1.07	0.0104	0.018	173	402	194.2	451.2
115	46	0.00635	-	-	0.2586	1.08	0.0104	0.018	172.3	400	195.4	454.1
120	49	0.00641	-	-	0.2607	1.09	0.0104	0.018	171.7	399	196.7	457.2
140	60	0.00662	0	0.003	0.2689	1.13	0.0105	0.0182	169.2	393	202.1	469.6
160	71	0.00683	0	0.005	0.2771	1.16	0.0106	0.0183	166.7	387	207.6	482.5
180	82	0.00704	0	0.01	0.2853	1.19	0.0107	0.0185	164.2	382	213.2	495.6
200	93	0.00725	0	0.018	0.2935	1.23	0.0108	0.0187	161.7	376	219.1	509.2
220	104	0.00746	0	0.032	0.3017	1.26	0.109	0.0189	159.3	370	225.1	523.2
240	116	0.00767	0	0.054	0.3099	1.3	0.011	0.019	157.5	366	232	539.1
260	127	0.00788	0.01	0.087	0.3181	1.33	0.0111	0.0192	157.8	360	238	553.1
280	138	0.00809	0.01	0.136	0.3263	1.37	0.0113	0.0196	152.7	355	244.7	568.8
300	149	0.0083	0.01	0.205	0.3345	1.4	0.0114	0.0197	150.3	349	251.4	584.4
320	160	0.00851	0.02	0.303	0.3427	1.43	0.0116	0.0201	148	344	258.3	600.3
340	171	0.00872	0.03	0.437	0.3509	1.47	0.0117	0.0203	145.6	338	265.2	616.3
360	182	0.00893	0.04	0.615	0.3591	1.5	0.0119	0.0206	143.2	333	272.2	632.6
380	193	0.00915	0.05	0.848	0.3673	1.54	0.0121	0.0209	140.8	327	279.4	649.2
400	204	0.00936	0.07	1E+05	0.3755	1.57	0.0123	0.0213	138.5	322	286.8	666.4
420	216	0.00957	0.1	1.528	0.3837	1.61	0.0126	0.0218	136.1	316	294.2	683.7
440	227	0.00978	0.13	2.003	3919	1.64	0.0128	0.0222	133.7	311	302	701.8
460	238	0.00999	0.16	2.595	0.4001	1.67	0.013	0.0225	131.3	305	309.5	719.3
480	249	0.0102	0.21	3.3	0.4083	1.71	0.0133	0.023	128.9	300	317.6	738.1
500	260	0.01041	0.26	4.165	0.4165	1.74	0.0135	0.0234	126.6	294	325.7	756.9
520	271	0.01062	0.33	5.207	0.4247	1.78	0.0138	0.0239	124.2	289	333.8	775.9
540	282	0.01083	0.4	6.424	0.4329	1.81	0.0141	0.0244	121.8	283	342.1	795.1
560	293	0.01104	0.49	7.882	0.4411	1.85	0.0144	0.0249	119.4	278	350.6	814.7
580	304	0.01125	0.6	9.564	0.4493	1.88	0.0147	0.0254	117	272	359.1	834.7

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600	316	0.01146	0.72	11.53	0.4575	1.91	0.015	0.026	114.7	267	368	855.1
620	327	0.01168	0.86	13.81	0.4657	1.95	0.0153	0.0265	111.7	260	376.5	875
640	338	0.01189	1.03	16.5	0.4739	1.98	0.0157	0.0272	108.3	252	384.5	893.6
660	349	0.0121	1.22	19.54	0.4821	2.02	0.016	0.0277	104.9	244	392.9	913.2
680	360	0.0131	1.43	22.91	0.4903	2.05	0.0164	0.0284	101.5	236	401.5	933.2
700	371	0.01252	1.68	26.91	0.4985	2.09	0.0168	0.0291	98.1	228	410.3	953.6
720	382	0.01273	1.96	31.4	0.5067	2.12	0.0171	0.0296	94.7	220	419.9	975.9
740	393	0.01294	2.29	36.69	0.5149	2.15	0.0176	0.0305	91.3	212	429.7	998.6
750	399	0.01305	2.47	39.57	0.519	2.17	0.0178	0.0308	89.6	208	434.7	1010.2

\* Data Represents typical laboratory samples and are not guaranteed for all samples.

<sup>1</sup> Enthalpy basis is liquid crystallizing point of 53.6°F (12°C)