

## Typical Physical Properties of Aqueous Solutions of Inhibited Propylene Glycol (freezing and boiling points)

Wt. % Propylene Glycol	Vol. % Propylene Glycol	Wt. % HTF-PG	Vol. % HTF-PG	Freezing Point °F	Boiling Point °F @ 760 mm Hg	Refractive Index 72°F
0.0	0.0	0.0	0.0	32.0	212	1.3328
5.0	4.8	5.2	5.0	29.1	212	1.3383
10.2	9.6	10.5	10.0	26.1	212	1.3438
15.0	14.5	15.7	15.1	22.9	212	1.3495
20.0	19.4	20.9	20.3	19.2	213	1.3555
21.0	20.4	22.0	21.3	18.3	213	1.3567
22.0	21.4	23.0	22.4	17.6	213	1.3579
23.0	22.4	24.0	23.4	16.6	213	1.3591
24.0	23.4	25.1	24.5	15.6	213	1.3603
25.0	24.4	26.1	25.5	14.7	214	1.3615
26.0	25.3	27.2	26.5	13.7	214	1.3627
27.0	26.4	28.2	27.6	12.6	214	1.3639
28.0	27.4	29.3	28.6	11.5	215	1.3651
29.0	28.4	30.3	29.7	10.4	215	1.3663
30.0	29.4	31.4	30.7	9.2	216	1.3675
31.0	30.4	32.4	31.8	7.9	216	1.3687
32.0	31.4	33.5	32.8	6.6	216	1.3698
33.0	32.4	34.5	33.9	5.3	216	1.3710
34.0	33.5	35.5	35.0	3.9	216	1.3721
35.0	34.4	36.6	36.0	2.4	217	1.3733
36.0	35.5	37.6	37.1	0.8	217	1.3744
37.0	36.5	38.7	38.2	-0.8	217	1.3756
38.0	37.5	39.7	39.2	-2.4	218	1.3767
39.0	38.5	40.8	40.3	-4.2	218	1.3779
40.0	39.6	41.8	41.4	-6.0	219	1.3790
41.0	40.6	42.9	42.4	-7.8	219	1.3802
42.0	41.6	43.9	43.5	-9.8	219	1.3813
43.0	42.6	45.0	44.5	-11.8	219	1.3825
44.0	43.7	46.0	45.7	-13.9	219	1.3836
45.0	44.7	47.0	46.7	-16.1	220	1.3847
46.0	45.7	48.1	47.8	-18.3	220	1.3858
47.0	46.8	49.1	48.9	-20.7	220	1.3870
48.0	47.8	50.2	50.0	-23.1	221	1.3881
49.0	48.9	51.2	51.1	-25.7	221	1.3892
50.0	49.9	52.3	52.2	-28.3	222	1.3903
51.0	50.9	53.3	53.2	-31.0	222	1.3914
52.0	51.9	54.4	54.3	-33.8	222	1.3924
53.0	53.0	55.4	55.4	-36.7	223	1.3935
54.0	54.0	56.5	56.5	-39.7	223	1.3945
55.0	55.0	57.5	57.5	-42.8	223	1.3956
56.0	56.0	58.5	58.5	-46.0	223	1.3966
57.0	57.0	59.6	59.6	-49.3	224	1.3977
58.0	58.0	60.6	60.6	-52.7	224	1.3987
59.0	59.0	61.7	61.7	-56.2	224	1.3998
60.0	60.0	62.7	62.7	-59.9	225	1.4008
65.0	65.0	68.0	68.0	<-60.0	227	1.4058
70.0	70.0	73.2	73.2	<-60.0	230	1.4104
75.0	75.0	78.4	78.4	<-60.0	237	1.4150
80.0	80.0	83.6	83.6	<-60.0	245	1.4193
85.0	85.0	88.9	88.9	<-60.0	257	1.4235
90.0	90.0	94.1	94.1	<-60.0	270	1.4275
95.0	95.0	99.3	99.3	<-60.0	310	1.4315

Typical properties are not to be confused with specifications. For additional protection, select a temperature in the above table that is at least 5°F lower than the expected lowest ambient temperature. When using solutions of less than 30% glycol, adjust inhibitor levels. For additional information and specific case assistance contact Additive Technologies laboratory services