

DOWCAL™ 100E

Borate Free Inhibited Ethylene Glycol-based Heat Transfer Fluid

DOWCAL™ 100E heat transfer fluid is a clear ethylene glycol-based liquid formulated with high quality corrosion inhibitors for optimum system performance. It is an optimal solution for when the freezing point of water is not low enough to allow its use in certain applications. Diluted with water, DOWCAL™ 100E offer reduced viscosity, increased heat capacity and thermal conductivity, and take advantage of the excellent heat transfer properties of water over a broad range of temperatures.

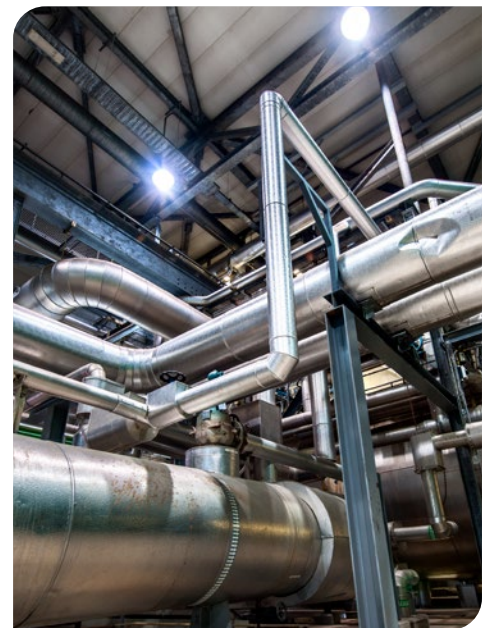
This next generation of DOWCAL™ Heat Transfer Fluids are borate free and contain inhibitors that offer best in class corrosion protection. The components of DOWCAL™ 100E are carefully selected based on sustainable, environmental and safety criteria and are combined to help maximize corrosion protection at a broad material compatibility.

Typical applications

- **Heating and Cooling Applications** - Ground Source Heat Pumps, HVAC (Heating, Ventilation & Air Conditioning)
- **Industrial applications** - Process chilling, batch processing systems, Heat recovery, freeze protection
- **Construction applications** - Snow melting systems, Floor heating, Ice skating rinks, Wind turbines, Electronic systems and Data centers.

Key Benefits

- **Long-lasting performance** - DOWCAL 100E can be operated for many years (10-25 years) in properly maintained systems
- **Excellent corrosion protection** - DOWCAL 100E provides optimal protection to metallic parts of process equipment - improving process efficiency and reducing maintenance costs.
- **Free of phosphate, nitrite, nitrate, borates and CMR (carcinogenic, mutagenic, and reprotoxic) components**

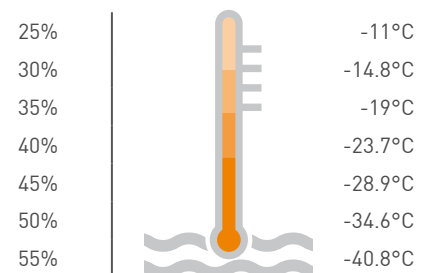


Packaging

- Can 25 Litre
- Drum 200 Litre
- IBC 1000 Litre
- Bulk-deliveries

All packaging can be ordered at requested concentration.

Freezing Point °C



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Typical Freezing, Boiling Points and other properties of DOWCAL™ 100E

DOWCAL™ 100E		DOWCAL™ 100E	FREEZING POINT	REFRACTIVE INDEX	BOILING POINT	DENSITY	DYN. VISCOSITY	KIN. VISCOSITY
VOL. %	WT. %		°C	@ 20°C	°C @ 1 BARA	G/CM³ @ 20°C	MPA.S @ 20°C	MM²/S @ 20°C
5.0	5.6		-1.6	1.3389	100.5	1.003	1.23	1.23
10.0	11.0		-3.6	1.3443	101.1	1.012	1.40	1.38
15.0	16.4		-6.1	1.3498	101.7	1.020	1.59	1.56
20.0	21.7		-9.0	1.3551	102.4	1.028	1.82	1.77
21.0	22.7		-9.7	1.3562	102.5	1.030	1.87	1.81
22.0	23.8		-10.3	1.3573	102.7	1.032	1.92	1.86
23.0	24.8		-11.0	1.3583	102.8	1.033	1.97	1.91
24.0	25.9		-11.7	1.3594	102.9	1.035	2.02	1.96
25.0	26.9		-12.5	1.3605	103.1	1.036	2.08	2.01
26.0	27.9		-13.2	1.3615	103.2	1.038	2.14	2.06
27.0	29.0		-14.0	1.3626	103.3	1.039	2.19	2.11
28.0	30.0		-14.8	1.3637	103.5	1.040	2.25	2.17
29.0	31.0		-15.6	1.3647	103.6	1.042	2.32	2.22
30.0	32.0		-16.4	1.3658	103.8	1.043	2.38	2.28
31.0	33.1		-17.2	1.3668	103.9	1.045	2.45	2.34
32.0	34.1		-18.1	1.3679	104.0	1.046	2.52	2.41
33.0	35.1		-19.0	1.3689	104.2	1.048	2.59	2.47
34.0	36.1		-19.9	1.3699	104.3	1.049	2.66	2.54
35.0	37.1		-20.8	1.3710	104.5	1.050	2.74	2.61
36.0	38.1		-21.7	1.3720	104.6	1.052	2.82	2.68
37.0	39.1		-22.7	1.3731	104.8	1.053	2.90	2.75
38.0	40.1		-23.7	1.3741	104.9	1.054	2.98	2.83
39.0	41.1		-24.7	1.3751	105.1	1.056	3.06	2.90
40.0	42.1		-25.7	1.3761	105.2	1.057	3.15	2.98
41.0	43.1		-26.7	1.3772	105.4	1.058	3.24	3.07
42.0	44.1		-27.8	1.3782	105.5	1.059	3.34	3.15
43.0	45.1		-28.9	1.3792	105.7	1.061	3.44	3.24
44.0	46.1		-30.0	1.3802	105.9	1.062	3.54	3.33
45.0	47.1		-31.1	1.3812	106.0	1.063	3.64	3.43
46.0	48.0		-32.2	1.3823	106.2	1.064	3.75	3.52
47.0	49.0		-33.4	1.3833	106.4	1.066	3.86	3.62
48.0	50.0		-34.6	1.3843	106.5	1.067	3.98	3.73
49.0	51.0		-35.8	1.3853	106.7	1.068	4.10	3.83
50.0	52.0		-37.0	1.3863	106.9	1.069	4.22	3.95
51.0	52.9		-38.2	1.3873	107.1	1.070	4.35	4.06
52.0	53.9		-39.5	1.3883	107.3	1.072	4.48	4.18
53.0	54.9		-40.8	1.3893	107.5	1.073	4.62	4.30
54.0	55.9		-42.1	1.3902	107.7	1.074	4.76	4.43
55.0	56.8		-43.4	1.3912	107.9	1.075	4.90	4.56
60.0	61.7		-50.3	1.3961	109.2	1.081	5.72	5.29
65.0	66.5		<-51	1.4009	110.8	1.086	6.70	6.17
70.0	71.3		<-51	1.4056	112.8	1.091	7.88	7.22
75.0	76.0		<-51	1.4103	115.4	1.096	9.33	8.51
80.0	80.8		<-51	1.4148	118.8	1.101	11.1	10.1
85.0	85.6		-50.9	1.4192	123.2	1.106	13.4	12.1
90.0	90.3		-40.8	1.4236	128.9	1.111	16.3	14.7
95.0	95.1		-34.5	1.4278	136.1	1.115	20.2	18.1
100.0	100.0		-28.7	1.4319	145.1	1.119	25.7	22.9

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