

DOWCAL™ 200E

Borate Free Inhibited Propylene Glycol-based Heat Transfer Fluid

DOWCAL™ 200E heat transfer fluid is a clear propylene 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™ 200E 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. Low acute toxicity makes DOWCAL™ 200E especially suitable for applications where toxicity is a concern.

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™ 200E 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 200E can be operated for many years (10-25 years) in properly maintained systems
- **Excellent corrosion protection** - DOWCAL 200E 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**
- **Low toxicity**

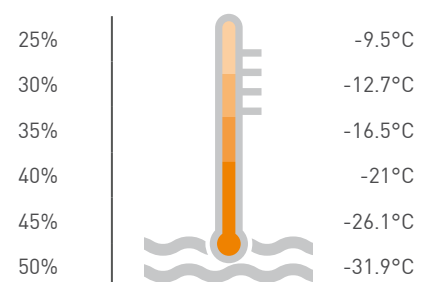


Packaging

- 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™ 200E

DOWCAL™ 200E	DOWCAL™ 200E	FREEZING POINT	REFRACTIVE INDEX	BOILING POINT	DENSITY	DYN. VISCOSITY	KIN. VISCOSITY
VOL. %	WT. %	°C	@ 20°C	°C @ 1 BARA	G/CM ³ @ 20°C	MPA.S @ 20°C	MM ² /S @ 20°C
5.0	5.2	-1.2	1.3392	99.6	0.998	1.25	1.26
10.0	10.4	-2.8	1.3451	100.0	1.005	1.51	1.50
15.0	15.5	-4.7	1.3510	100.6	1.011	1.82	1.80
20.0	20.5	-7.0	1.3568	101.3	1.016	2.19	2.15
21.0	21.5	-7.5	1.3580	101.4	1.017	2.27	2.23
22.0	22.5	-8.0	1.3591	101.5	1.019	2.36	2.31
23.0	23.5	-8.6	1.3603	101.6	1.020	2.45	2.40
24.0	24.5	-9.2	1.3614	101.7	1.021	2.54	2.49
25.0	25.5	-9.8	1.3626	101.7	1.022	2.64	2.58
26.0	26.5	-10.4	1.3637	101.8	1.022	2.74	2.68
27.0	27.5	-11.0	1.3649	101.9	1.023	2.84	2.77
28.0	28.5	-11.7	1.3661	102.0	1.024	2.95	2.88
29.0	29.5	-12.4	1.3672	102.0	1.025	3.06	2.98
30.0	30.5	-13.0	1.3683	102.1	1.026	3.18	3.09
31.0	31.5	-13.8	1.3695	102.2	1.027	3.30	3.21
32.0	32.5	-14.5	1.3706	102.2	1.028	3.42	3.33
33.0	33.4	-15.3	1.3718	102.3	1.029	3.55	3.45
34.0	34.4	-16.1	1.3729	102.4	1.030	3.69	3.58
35.0	35.4	-16.9	1.3740	102.5	1.030	3.83	3.71
36.0	36.4	-17.7	1.3751	102.5	1.031	3.97	3.85
37.0	37.4	-18.6	1.3763	102.6	1.032	4.12	4.00
38.0	38.4	-19.4	1.3774	102.7	1.033	4.28	4.15
39.0	39.3	-20.4	1.3785	102.8	1.033	4.45	4.30
40.0	40.3	-21.3	1.3796	102.9	1.034	4.62	4.46
41.0	41.3	-22.2	1.3807	103.0	1.035	4.79	4.63
42.0	42.3	-23.2	1.3818	103.1	1.036	4.98	4.80
43.0	43.3	-24.2	1.3829	103.2	1.036	5.17	4.99
44.0	44.2	-25.3	1.3840	103.3	1.037	5.36	5.17
45.0	45.2	-26.3	1.3851	103.5	1.038	5.57	5.37
46.0	46.2	-27.4	1.3862	103.6	1.038	5.78	5.57
47.0	47.2	-28.5	1.3873	103.8	1.039	6.01	5.78
48.0	48.2	-29.7	1.3883	103.9	1.039	6.24	6.00
49.0	49.1	-30.8	1.3894	104.1	1.040	6.48	6.23
50.0	50.1	-32.0	1.3905	104.3	1.040	6.73	6.47
51.0	51.1	-33.3	1.3915	104.5	1.041	6.99	6.71
52.0	52.1	-34.5	1.3926	104.7	1.041	7.26	6.97
53.0	53.0	-35.8	1.3936	104.9	1.042	7.54	7.23
54.0	54.0	-37.1	1.3947	105.1	1.042	7.83	7.51
55.0	55.0	-38.5	1.3957	105.4	1.043	8.13	7.80
60.0	59.9	-45.6	1.4008	106.6	1.045	9.84	9.42
65.0	64.8	<-51	1.4057	108.0	1.047	11.9	11.4
70.0	69.7	<-51	1.4104	109.5	1.048	14.5	13.9
75.0	74.6	<-51	1.4150	111.1	1.049	17.7	16.9
80.0	79.6	<-51	1.4193	113.2	1.049	21.8	20.7
85.0	84.6	<-51	1.4234	116.2	1.048	27.0	25.7
90.0	89.7	<-51	1.4272	120.9	1.047	34.1	32.6
95.0	94.8	<-51	1.4308	128.8	1.045	45.1	43.1
100.0	100.0	<-51	1.4340	141.7	1.042	68.9	66.1