



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 DOWCALTM Heat Transfer Fluids are borate free and contain inhibitors that offer best in class corrosion protection. The components of DOWCALTM 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

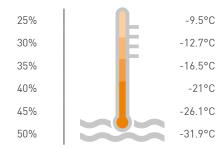


Packaging

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

All packaging can be ordered at requested concentration.

Freezing Point °C



Denmark

Univar Solutions A/S Islands Brygge 43 DK-2300 Copenhagen S T: +45 35 37 12 44

E: univar.dk@univarsolutions.com

www.univarhtf.dk

Norway

Rosenholmveien 25 NO-1414 Trollåsen Tel: +47 22 88 16 00 E: ordre.no@univarsolutions.com

www.univarhtf.no

Sweden

Kungsgatan 6 SE-211 49 Malmö Tel: +46 40 35 28 00 E: order.se@univarsolutions.com

www.univarhtf.se





Typical Freezing, Boiling Points and other properties of DOWCAL™ 200E

VOL.% WT. % °C @ 20°C °C @ 1 BARA G/CM* @ 20°C MPA.S @ 20°C MM*/S @ 2 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
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
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
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
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
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
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
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
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
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

© 2021 Univar Solutions Inc. All rights reserved. Univar, the collaboration insignia, and other identified trademarks are the property of Univar Solutions Inc. or affiliated companies. All other trademarks not owned by Univar Solutions Inc. or affiliated companies that appear in this material are the property of their respective owners. The information contained herein cannot be changed without notice and you should contact the distributor to confirm. Read and follow the Product Label & Safety Data Sheet ("SDS") for your health. All information all obtained from the manufacturer or other recognized technical sources. Univar is solitions in c. and its affiliates ("Univar") provides this information are as is and makes no representation or warranty, express, or implied, concerning the accuracy or sufficiency of the information and disclaims all limpled warranties. Univar is not liable for any damages resulting from the use or non-use of the information and but his responsible for its own actions. The Customer's responsible for determining whether products and the information in this document are appropriate for Customer's use and for the adherence to the legal and regulatory environment and constraints within which the Customer operates in. Any information provided by Univar cannot be construed as a permission to use any product or process in breach of existing patents All transactions involving this Product(s) are subject to Univar's standard Terms and Conditions, available at www.univarsolutions.com or upon request. 000013339 - 2021