



Seek **Together**™

## Dow Industrial Solutions

# DOWCAL™ 100E and DOWCAL™ 200E Heat Transfer Fluids

Borate-Free Inhibited Glycol-based Low Temperature Thermal Fluids

## Quick Reference Guide



Dow is expanding its product portfolio in low temperature heat transfer fluids to help meet the performance and sustainability requirements of our customers. Reach and borate free requests. This is in line with our corporate Sustainability 2025 goals.

### Advantages of using Borate Free DOWCAL™ Heat Transfer Fluids.

- **Corrosion Protection** - DOWCAL™ Fluids are formulated with corrosion inhibitors to offer protection to equipment and piping.
- **Long-lasting Performance** - DOWCAL™ Fluids can be operated for many years in properly maintained system.

**Sustainability** – A sustainable future can't be achieved without considering chemistry. With our 2025 Safe Materials for a Sustainable Planet Goal, Dow is committed to demonstrating the value of chemistry and materials science to society and improving the way the world understands and considers science in decision-making to maximize benefits to businesses, society and the planet. Under this goal element we commit to launching sustainable materials that address chemistries or applications that are viewed as sustainably challenged.

DOWCAL™ 100E and DOWCAL™ 200E Heat Transfer Fluids are free of Substance of Very High Concern (SVHC) according to REACH Regulation (EC) No 1907/2006. Both new heat transfer fluid formulations offer reliable, economical and sustainable solutions for long-term performance protection heat transfer fluids system. CMR (cancerogenic, mutagenic, and reprotoxic) materials and components such as borate, nitrite, nitrate are not used in the DOWCAL 100E and DOWCAL 200E Fluids.

### Freeze Protection

Water- based heating and cooling system

### Heating, Ventilation and Air Conditioning (HVAC)

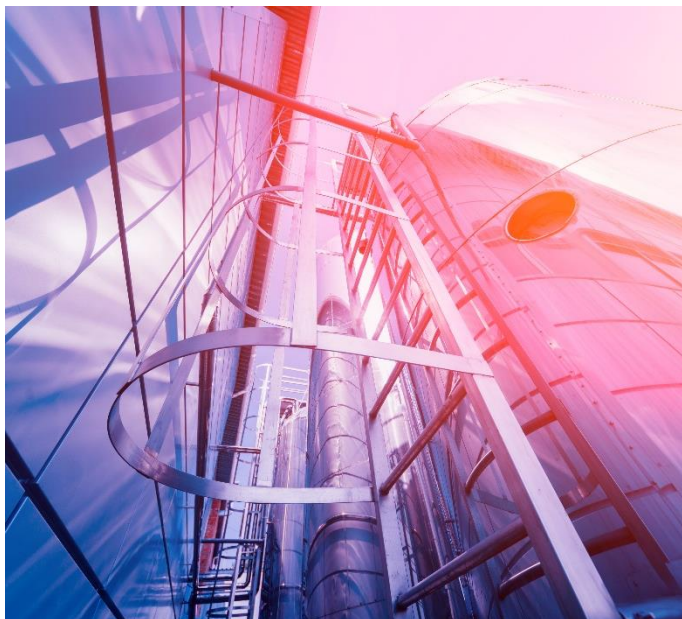
- Chill water & hydronic heating loops
- Geothermal (ground source heat pumps)

### Industrial Applications

- Process chilling and batch processing in chemical and pharmaceutical industry
- Heat recovery and process tracing

### Construction

- Ice skating rinks
- Snow melting systems & turf heating systems
- Floor heating



### Selecting the right DOWCAL™ Fluid.

**DOWCAL™ 100E** – Ethylene glycol-based fluid exhibiting lower viscosity and heat transfer performance for HVAC and chemical industry.

**DOWCAL™ 200E** – Propylene glycol-based fluid with low acute toxicity as an alternative to ethylene glycol for secondary cooling or heating in construction and industry.

### Key Benefits:

- Best in class corrosion protection even at 20% vol. concentration.
- Exceptional aluminum corrosion protection.
- Free of borate, nitrate, nitrite, phosphate and CMR (carcinogenic, mutagenic, reprotoxic) classified ingredients. \*



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### Typical Properties of DOWCAL™ 100E † Heat Transfer Fluid

Composition (% by weight)			Test Method
	Ethylene Glycol	94	
	Inhibitors	6	
Color			Colorless
Density at 20 °C	g/cm <sup>3</sup>	1.114	ASTM D7042
pH of Solution	(50% Vol. in Water)	8.0 – 8.8	ASTM E70
Reserve alkalinity min.	mL (0.1 N HCl)	9.5	ASTM D1121
Freeze point (50% vol in water)	°C	- 36	ASTM D1177

### Typical Properties of DOWCAL™ 200E † Heat Transfer Fluid

Composition (% by weight)			Test Method
	Propylene Glycol	94	
	Inhibitors	6	
Color			Colorless
Density at 20 °C	g/cm <sup>3</sup>	1.043	ASTM D7042
pH of Solution	(50% Vol. in Water)	7.7 – 8.5	ASTM E70
Reserve alkalinity min.	mL (0.1 N HCl)	9.0	ASTM D1121
Freeze point (50% vol in water)	°C	- 32	ASTM D1177

† Typical properties not to be construed as specifications.  
Complete sales specifications are available on request.

\* DOWCAL™ 100E and DOWCAL™ 200E are phosphate, nitrite, nitrate, borate and CMR(Carcinogenic, mutagenic, and reprotoxic) free, being manufactured without the use of these substances.

### Contact Information

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