PROPSTAR® CRYOSET™

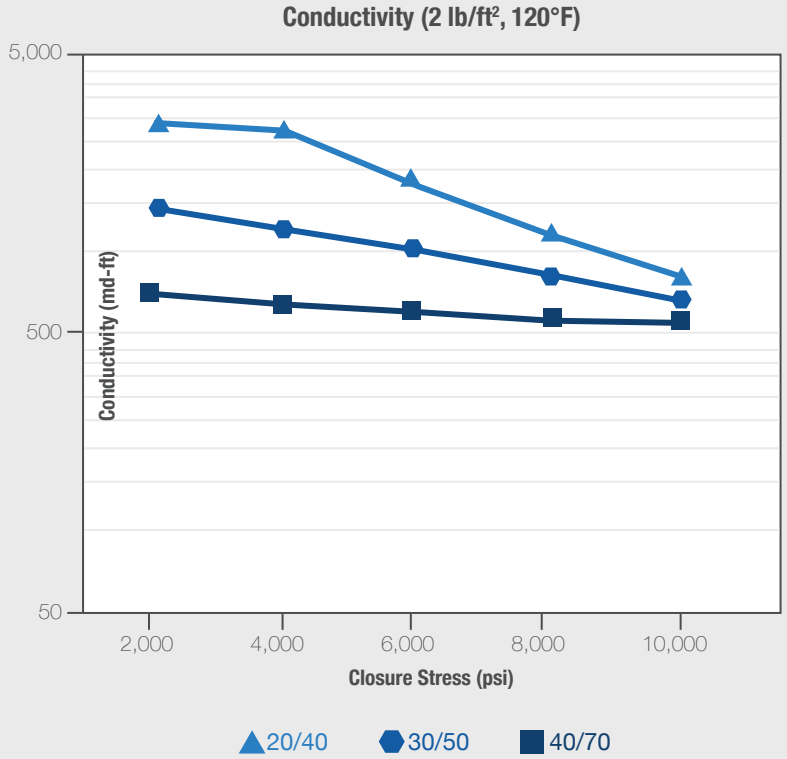
RESIN COATED PROPPANTS

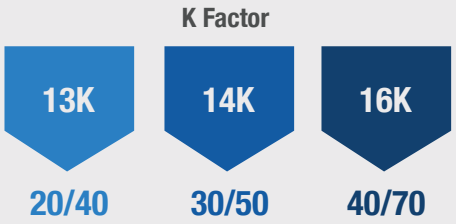
YOUR NEEDS DRIVE OUR SOLUTIONS

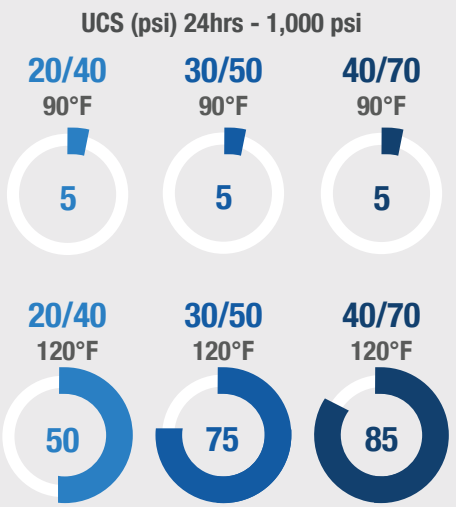
Flowback Control in Low Temperature Reservoirs

PROPSTAR® CRYOSET™ curable resin coated sand provides flowback control in low temperature environments with exceptional conductivity. This innovative technology enhances the capabilities of natural fracturing sand to deliver superior reservoir performance. No chemical activator is required.

- PROPSTAR CRYOSET is only coated on premium northern white UNIFRAC® proppants
- The absence of a chemical activator provides a safer, cleaner, and simpler operation
- Delivers superior crush resistance while maintaining proppant pack integrity
- The curable resin system distributes stress over the proppant pack, reducing embedment







Analyses are conducted by recognized and independent industry laboratories.
Test Conditions: 2 lb/ft² cell loading at 120°F with 2% KCl between Ohio Sandstone

API RP 19D 2 lb/ft², 120°F

Conductivity (md-ft)

PSI	20/40	30/50	40/70
2,000	2,921	1,650	803
4,000	2,662	1,256	703
6,000	1,587	855	563
8,000	858	738	542

Permeability (Darcy)

PSI	20/40	30/50	40/70
2,000	147	80	39
4,000	131	63	35
6,000	84	44	29
8,000	48	39	23

Physical Properties (API RP 19C)

	20/40	30/50	40/70
Specific Gravity	2.55	2.50	2.50
Bulk Density (g/cm³)	1.56	1.51	1.50
Bulk Density (lb/ft³)	97.4	94.3	93.6
K Factor	13K	14K	16K
Krumbein Roundness	0.7 - 0.9	0.7 - 0.9	0.7 - 0.9
Krumbein Sphericity	0.7 - 0.9	0.7 - 0.9	0.7 - 0.9
Acid Solubility (wt %)	<2.0	<2.0	<3.0
Turbidity (NTU/FTU)	<20	<20	<20

UNIMIN® ENERGY SOLUTIONS™
A SIBELCO GLOBAL DIVISION
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