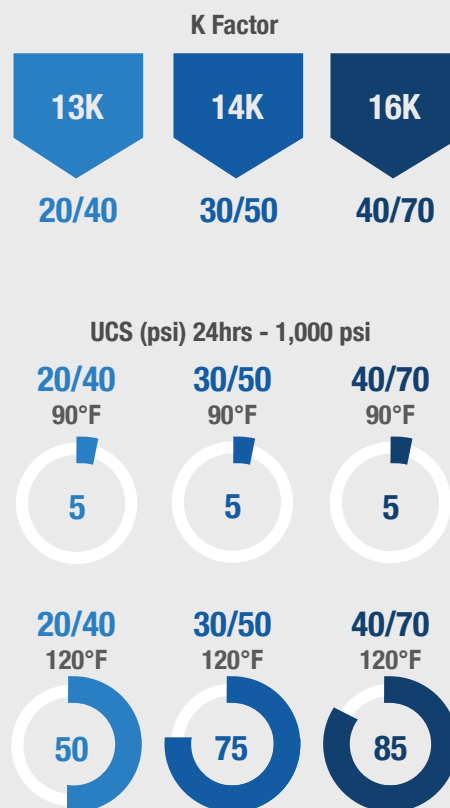
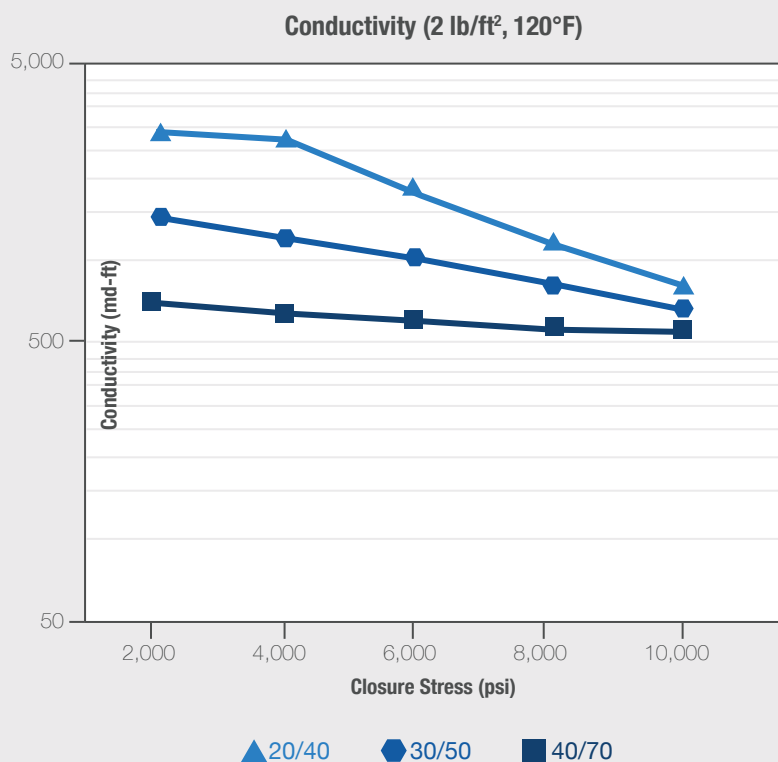


Flowback Control in Low Temperature Reservoirs

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/cm ³)	1.56	1.51	1.50
Bulk Density (lb/ft ³)	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



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PRODUCT WARNINGS AND PERFORMANCE DISCLAIMER: ENERGY

Silica - HEALTH HAZARD WARNING: Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC and NTP have determined that crystalline silica can cause lung cancer in humans. Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.

Resin Coated Proppants - SAFETY AND HEALTH WARNING: POSSIBLE DUST EXPLOSION HAZARD Material may form combustible dust concentrations in air. Avoid creating dust when handling, using or storing. Keep dust away from heat and all sources of ignition. Do not exceed 5 psi when unloading this material to minimize the creation of airborne dust explosion hazard. **MAY CAUSE AN ALLERGIC SKIN REACTION.** Avoid prolonged or repeated skin contact. **LUNG INJURY AND CANCER HAZARD.** Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC and NTP have determined that crystalline silica can cause lung cancer in humans. Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.

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