



Badger Tundra™

Superior by Nature, Quality by Badger®

Badger Tundra™ is specifically designed to prevent proppant flowback in low temperature reservoirs without the need for an activator. Developed with a unique and exclusive resin complex, Badger Tundra™ develops consistent Unconfined Compressive Strength (UCS) you can count on, making it the *real* Low Temperature Proppant Flowback Solution. Badger Tundra™ is built exclusively on Northern White sand substrate, so you get the same strength, resistance to embedment, and conductivity you have come to expect from the rest of the BadgerCoated® product line. Badger Tundra™ can provide flowback control in temperatures as low as 70 degrees Fahrenheit.

Typical Properties

	20/40	30/50	40/70
Krumbein Shape Factor - Sphericity	0.7 - 0.8		
Loss on Ignition	0.6% - 1.1%		
Turbidity (NTU)	< 200		
Acid Solubility	< 2%		
Absolute Volume (gal / lb)	0.046 - 0.048		
Particle Size Distribution	Meets API RP 19C		
Physical State	Free Flowing Solid		
Color	Clear Coated		
Bulk Density (lb./ft ³)	104.35	103.96	104.17
Bulk Density (lb./gal)	13.95	13.90	13.92
Bulk Density (g/cc)	1.67	1.67	1.67
Specific Gravity	2.60	2.66	2.67
Recommended Temperature Range	70° F — 160° F		
UCS Value (PSI) *	27	45	42

* UCS Values are average results for 24 hours at 90 degrees Fahrenheit.

Conductivity md-ft @ 125° F (52° C)

Closure Stress (PSI)	20/40	30/50	40/70
2,000	1,857	1,002	583
4,000	1,499	875	515
6,000	1,014	684	422
8,000	616	456	314
10,000	340	268	214

** Data points represent the median value of accumulated Stim-Lab data*

Permeability Darcy

Closure Stress (PSI)	20/40	30/50	40/70
2,000	104	57	33
4,000	85	50	29
6,000	58	40	24
8,000	36	27	19
10,000	20	16	13

** Data points represent the median value of accumulated Stim-Lab data*

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All chemical and physical properties are typical and tested in accordance with ISO 13503-2/API 19C in BMC's laboratories. We give no warranty for our products, either expressed or implied. We recommend that you confirm all properties in the laboratory of your choice.



Silica Sand and Resin-Coated Silica Sand Products DANGER

These products have been classified, following the Globally Harmonized System (GHS) of Classifying and Labeling Chemicals criteria, as a Category 1A Carcinogen, a Category 1 Specific Target Organ Toxicity (following repeated exposures), and a Category 2B Eye Irritant. For Industrial Use Only. DO NOT USE THIS PRODUCT FOR BLASTING OR AS AN ABRASIVE. DO NOT PNEUMATICALLY UNLOAD THE RESIN-COATED SILICA SAND PRODUCTS AT A PRESSURE EXCEEDING 5 PSI SO AS TO AVOID ABRADING THE PRODUCT. DO NOT BREATHE DUST. Read the specific Safety Data Sheet (SDS) before using and follow applicable local, state and federal health and safety standards. The SDSs for the products are available online at www.badgerminingcorp.com or by calling 715-662-2400. October 22, 2016 Revision E