Atlas Economy Curable Resin Coated (CRC-E)

Superior by Nature, Quality by Badger®

Atlas Economy Curable Resin Coated (CRC-E) products provide an economical solution for proppant flowback prevention without sacrificing the strength and conductivity you need. Our exclusive resin complex provides protection from harsh well conditions and reduces or eliminates fines migration in the fracture. The durable nature of our coating significantly reduces embedment versus uncoated propping agents like hard ceramic proppants, and because our coating is nonreactive it reduces scale formation.

All BadgerCo*ated*® products are coated on a premium Northern White sand substrate.

- CRC-E is our Economy line of Curable Proppant and is 1.9 – 2.3% resin by weight.
- CRC-E products are the solution for proppant flowback in moderate temperature wells (110° F or higher) and work in conjunction with our Atlas Activator.

Typical Properties

	20/40	30/50	40/70
Krumbein Shape Factor - Sphericity	0.7 - 0.8		
Loss on Ignition	1.9% - 2.3%		
Turbidity (NTU)	< 200		
Acid Solubility	< 2%		
Absolute Volume (gal / lb)	0.046 - 0.048		
Particle Size Distribution	Meets API RP 19C		
Color	Gold		
Physical State	Free Flowing Solid		
Bulk Density (lb./ft^3)	99.26	99.26	96.14
Bulk Density (lb./gal)	13.27	13.27	12.85
Specific Gravity	2.57	2.55	2.55
Lowest Temperature for Product without Activator	175°F	160°F	160°F

For unconfined compressive strength (UCS) numbers, please utilize the tool on our website entitled *UCS Results Comparison: Proppant Flowback Prevention Recommendations.*

Atlas CRC-E

Conductivity md-ft @ 250° F (121° C)

Closure Stress PSI	20/40	30/50	40/70
2,000	1,847	1,109	468
4,000	1,642	1,003	426
6,000	1,340	873	380
8,000	885	662	298
10,000	518	445	207
12,000	263		

** 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	63	27
4,000	93	57	25
6,000	77	50	22
8,000	52	38	17
10,000	31	21	13
12,000	16		

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

www.badgerminingcorp.com BMCCustomerResourceTeam@badgerminingcorp.com

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 800-285-0038. January 2020 Revision G

Badger Mining Corporation - 409 S. Church Street, Berlin, Wisconsin 54923 - Phone: 920.361.2388 - 800.932.7263 - Fax: 920.361.2826