TECHNICAL DATA SHEET

KRYPTOAIR

High-performance, ultra-low density ceramic proppant for gravel packs

KRYPTOAIR™ combines the strength and durability of KRYPTOSPHERE® technology with the volume and transport advantage of CARBOAIR® ultra-low density technology.

The result is a ceramic proppant with excellent transport characteristics that travels farther into the fracture network to increase the Propped Reservoir Volume™ (PRV). The transport characteristics of KRYPTOAIR technology enable the use of lower fluid viscosity and pump rates in gravel pack applications. This allows efficient proppant placement and the full packing of the annular space in open- and cased-hole gravel packs while avoiding fracturing the formation.

Physical and chemical properties

Typical sieve analysis [weight % retained]

U.S. Mesh [mesh]	Microns	25 Mesh	35 Mesh
-16+18 mesh	-1,190+1,000	0	
-18+20 mesh	-1,000+840	2	
-20+25 mesh	-840+710	98	
-25+30 mesh	-710+589	0	2
-30+35 mesh	-589+500		95
-35+40 mesh	-500+420		3
Median particle diameter [microns]		770	550
API/ISO crush test % by weight fines generated @4,000 psi		10	8

Sizing requirements: These specifications meet the recommended practices as detailed in ISO 13503-2.

Typical additional properties

Roundness	0.9	Apparent specific gravity	1.6
Sphericity	0.9	Absolute volume [gal/lb]	0.075
Bulk density [lb/ft^3] [g/cm^3]	57.4 0.92		

Long-term conductivity

Reference* values @ 250°F (121°C) and 2,000 psi closure stress

	25 Mesh	35 Mesh
Permeability (D)	280	55
Conductivity (md-ft)	7,700	1,550

*Reference conductivity and permeability are measured with a single phase fluid under laminar flow conditions in accordance with API RP 19D. In an actual fracture, the effective conductivity will be much lower due to non-Darcy and multiphase flow effects. For more information, please refer to SPE Paper #106301 - "Determining Realistic Fracture Conductivity and Understanding its Impact on

Talk to CARBO to find out how we can help you enhance your production.

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