

Technical Sales Bulletin

Resin Coated Proppants

Low temperature bonding without a consolidation aid

SiberProp[™] Low Temperature Resin Coated Sand



















SiberProp™ proppants are a
Stress Bond™ technology type
resin coated sand available in a
16/30 mesh size. Tan in color,
the SiberProp resin system is
applied to high quality frac sand.

The unique properties of the SiberProp resin have redefined curable proppants. By using a specially formulated resin system, SiberProp proppants develop significant strength in the bonded pack at very low bottom-hole temperatures without the need for external activators.

This proppant has a history of success in many of the major plays throughout North America and is particularly successful in the Permian Basin¹.

Technical Applications

Fracture Treatments:

- At closure stress up to 8,000 psi [55MPa]
- At bottom-hole static temperatures from 130 – 200°F (54 – 93°C)
- When high strength in the bonded pack is necessary or desirable at very low temperatures

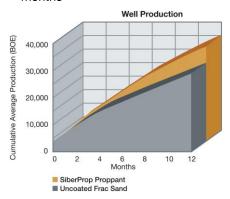
Technical Advantages and Benefits

- Low temperature bonding down to 130°F (54°C) bottom-hole static temperature without the use of a low temperature consolidation aid
- Optimized AcTivatorTM consolidation aid loading recommendations are available based on well specifics to maximize performance and minimize additional cost to the operator
- Higher strength in the bonded pack at lower temperatures than conventional curable resin coated proppants
- Consolidates with closure stress in the fracture
- Helps prevent proppant flowback

SiberProp Proppant Case History

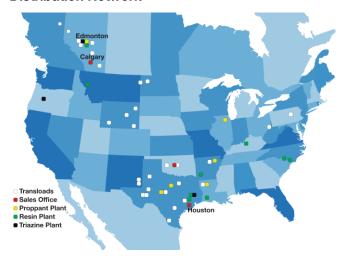
A Permian Basin operator increased oil production in their well by utilizing SiberProp proppant.

- SiberProp proppant tail-in wells outperformed 100% uncoated frac sand wells
- 42% more production in the first 12 months
- ROI for SiberProp proppant: two months



Well Characteristics				
Production	Oil			
TVD	6,900 – 7,100 ft			
BHST	150°F (66°C)			
Closure Stress	4,800 – 5,200 psi			
Proppant	SiberProp Proppant, UFS			
Frac Fluid	Crosslinked Fluids			

North America Manufacturing and Distribution Network



Hexion continues to expand capacity and strategically locate transloads near the major shale plays in North America to meet the industry's increasing need for resin coated proppants.

SiberProp Proppant Long-Term Conductivity

Stim-Lab, Inc. Consortium Long-Term Baseline Procedure Proppant Concentration: 2 lb/ft² (9.8 kg/m²), Temperature: 150°F (66°C)

Closure Stress (psi)	2,000	4,000	6,000	8,000	
Size	Conductivity (md-ft)				
16/30	5,089	4,125	2,708	1,226	

References

1. SPE 97161-MS: "Flowback Prevention – A New Technology for Low BHST Applications", Johnson, D.E. et al., 2005.



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