

# 30/50-Mesh

Premium frac sand



## APPLICATIONS

- Hydraulic fracturing operations
- Operations that require proppant with premium performance specifications

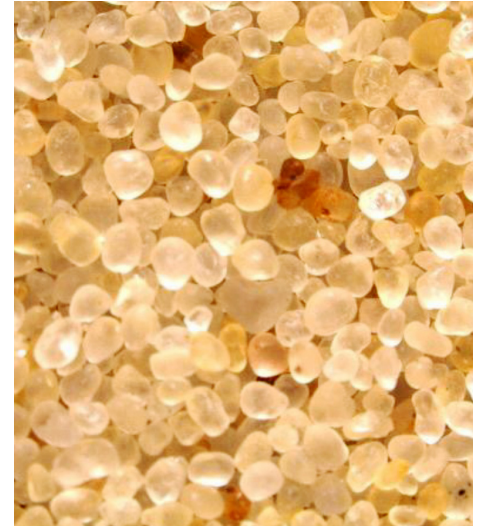
## BENEFITS

- Ensures superior long-term conductivity due to high crush resistance
- Minimizes fines generation due to high roundness and sphericity
- Withstands closure stresses up to 8,000 psi

## FEATURES

- Compliance with API RP 19C and ISO 13503-2
- Roundness and sphericity values typically greater than or equal to 0.7
- Low acid solubility and turbidity reduce dust and fines generation
- High silica content provides superior crush performance

30/50-mesh premium frac sand is selected with the highest quality standards. Sourced from Midwest mines in Wonewoc formations, 30/50-mesh premium frac sand exceeds industry expectations for high-quality Northern White sand. The high resistance to crush and very low acid solubility enable 30/50-mesh premium frac sand to withstand harsh downhole conditions and maintain strength and integrity after fracture closure.



30/50-mesh premium frac sand has high silica content with roundness and sphericity values typically greater than or equal to 0.7.

Properties	
Density, g/cm <sup>3</sup>	2.64
Bulk density, g/cm <sup>3</sup>	1.53
Roundness	0.7
Sphericity	0.7
Grain size distribution (GSD), in size wt %	>90
Acid solubility, % <sup>†</sup>	0.4
Turbidity, NTU	22.0

<sup>†</sup>Performed in 12:3 mud acid for 30 minutes at 150 degF (66 degC)

## Crush Test (ISO 13503-2)

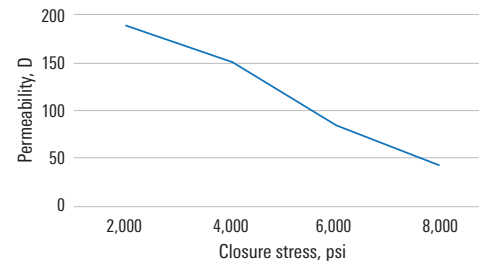
Stress, psi	Fines, wt %
4,000	0.9
8,000	9.1
9,000	12.0
K value	8,000

## Conductivity and Permeability

Stress, psi	Conductivity, mD-ft	Permeability, D
2,000	2,996	188
4,000	2,274	151
6,000	1,209	87
8,000	570	44

Test Conditions: ISO 13503-5  
Wisconsin sandstone, 150 degF (66 degC), 2 lbm/ft<sup>2</sup> (9.8 kg/m<sup>2</sup>)  
50 h, 2 wt % (167 lbm/1,000 galUS [20 kg/m<sup>3</sup>]) potassium chloride (KCl)

Typical Sieve Analysis	
Mesh	wt %
20	0.00
30	0.20
35	9.80
40	36.50
45	40.90
50	10.80
70	0.20
Pan	0.00
Median diameter, mm	0.41



Permeability measured at 150 degF, 2 lbm/ft<sup>2</sup>. High crush resistance, roundness and sphericity values contribute to high permeability.