

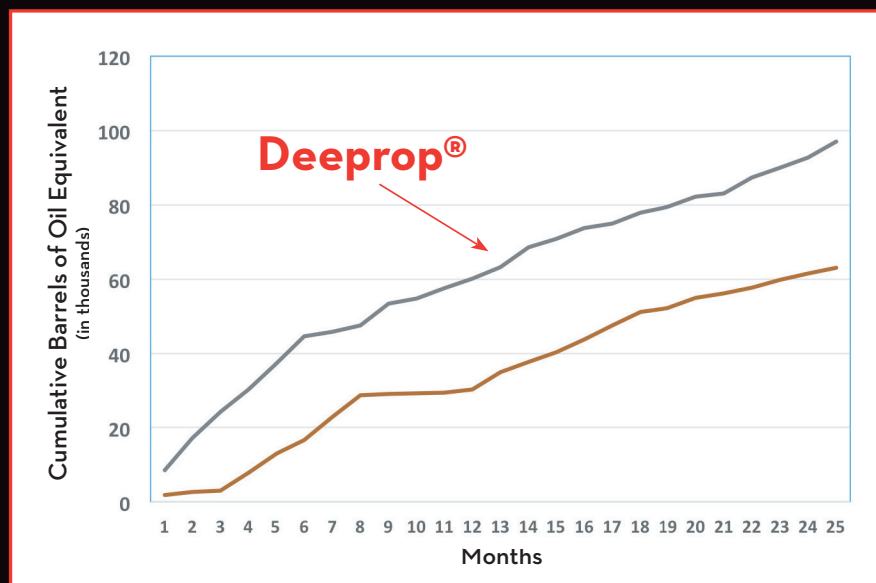
Introducing

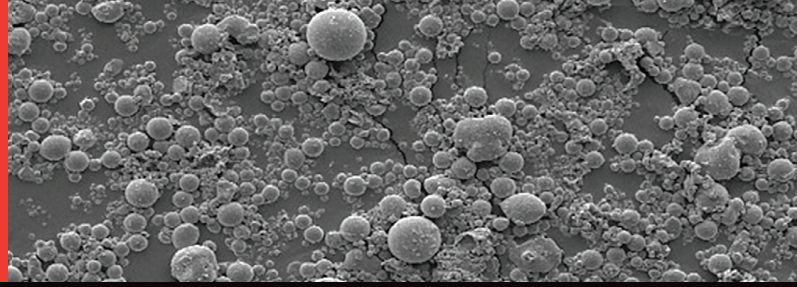
Deepprop® is a small, very strong, spherical proppant that is used to support secondary fractures created in shale during the hydraulic fracturing process. This microproppant is designed to provide long-term conductivity in the fracture network that would normally go unsupported by other proppants. **Deepprop®** supports fractures that are 75 microns and smaller. It supports high closure pressure and has high temperature stability.

Proven Field Data

25 Months of Cumulative Results

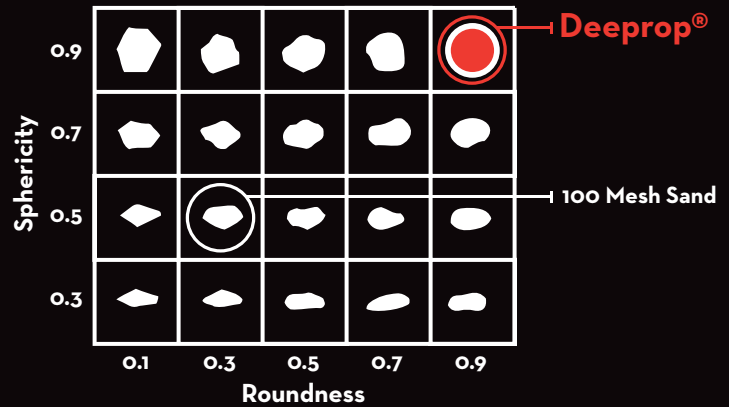
An estimated 200 wells have used **Deepprop®** with average results of a 25% to 50% increase in cumulative production in the treated versus the control wells. An example comparison is shown below where after 25 months of production in the Barnett Shale field, the **Deepprop®** treated well produced 96,930 BOE from a 5,252 foot long lateral, versus the well without **Deepprop®** which produced 63,062 BOE from a 5,712 foot long lateral. The 25 month cumulative production for the **Deepprop®** well produced 18 BOE per foot of lateral and the well not incorporating **Deepprop®** produced 11 BOE per foot of lateral. Even though the lateral was 10% shorter, the Deepprop® well produced 33,868 BOE more oil. At \$45/bbl Deepprop® added \$1,524,060.





Technical Data

- Compressive Strength = **15,000 PSI**
- Density = **2.5 gm/cc**
- Sphericity = **0.9**
- Roundness = **0.9**
- Acid Solubility = **0.8% in 15% HCl**



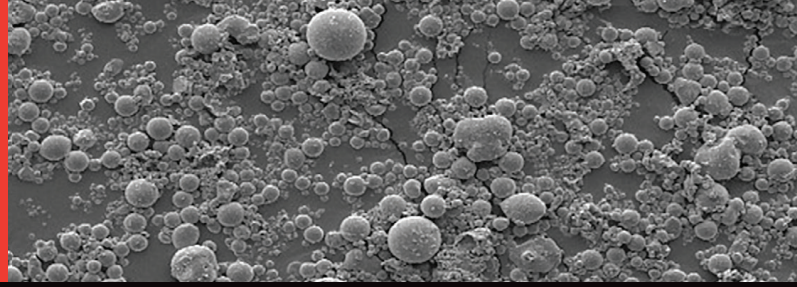
Product Information

	D50 Particle Size (microns)	D90 Particle Size (microns)	Full Particle Size Distribution (microns)
Deepprop[®] 1000	25	115	5-200

Pumping Formula

In a typical horizontal stage approximately 350,000 pounds of 40/70 mesh and 100 mesh sand are used as proppants. **Deepprop[®]** is used in addition to 40/70 and 100 mesh sand to support the secondary fracture network.

Depending on the natural fracture network, 10,000 to 15,000 lbs of **Deepprop[®]** is recommended per stage.



Deepprop[®] Slurry[™]

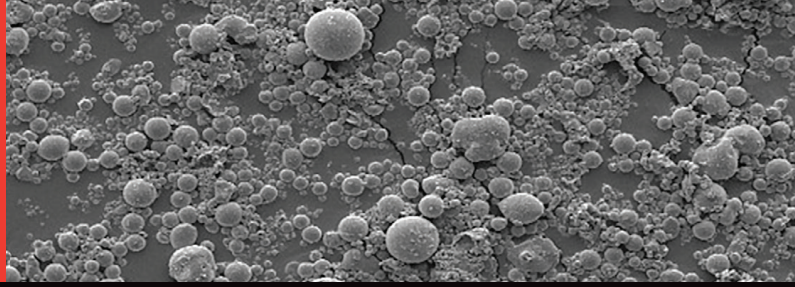
Technical Data Sheet



Deepprop[®] 1000 slurry currently in use

Product Specifications:

- Aqueous Based, 120 day stability
- Winterized version available, flowable down to 0 degrees fahrenheit
- Product Loading 8.2 lb/gal 65% solids
- Density 13.2 lb/gal
- Fann 35 Viscosity 225 cps @ 300 rpm
- PH 9 at 80 degrees fahrenheit



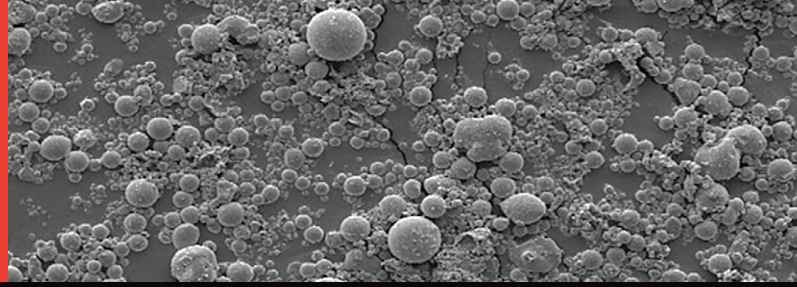
Deepprop[®] Slurry[™]

Technical Data Sheet

LOGISTICS

- Slurry is cost effectively delivered in bulk to job location.
- Slurry quickly transferred to ISO tanks.
- ISO tanks outfitted with WiFi enabled level indicator that is remotely monitored for resupply.
- Slurry pumped on location without any special equipment. Product pumped via Centrifugal pump into missile manifold, then mixed with Slickwater prior to being pumped downhole.

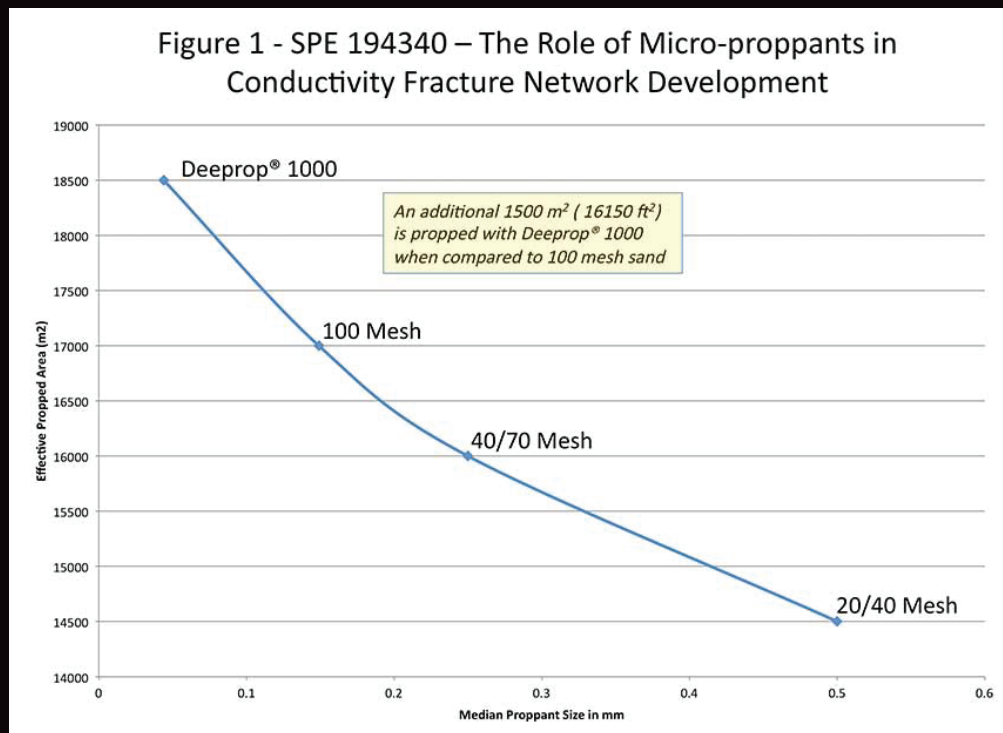


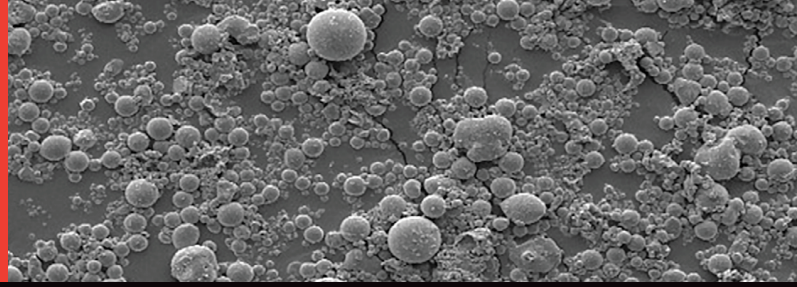


Deepprop[®] Microproppant

Product Benefits:

- Type curves and 3 plus years of field data demonstrate proven results
- Operator payback in 1 to 4 months.
- Field trial data supports cases where less sand was used in tandem with Deepprop[®] 100 to achieve close to cost neutral jobs with significant uplift.
- Results available in the Delaware and Permian Basin, SCOOP, Utica, Marcellus, and Fayetteville. Field trials are in progress in the Eagleford.





Product Information

	<i>D50 Particle Size (microns)</i>	<i>D90 Particle Size (microns)</i>	<i>Full Particle Size Distribution (microns)</i>
Deeprop[®] 1000	25	115	5-200

Deeprop[®] Microproppant

Product Benefits:

- Results available from 5 shale reservoirs in both oil and gas plays with 2 additional reservoirs in 2019.
- Proven operator benefits of uplift, EUR, less steep decline curves and lower treating pressure.
- Deeprop[®] 1000 pumped first to prop open the secondary fracture network and create more stimulated rock volume.
- Penetrates fissures up to ten times smaller than 100 mesh sand (FIG 1).
- Conductivity significant compared to silica flour which has no published conductivity data.
- Recommended in rock where the modulus is 2.5 MM or greater and the permeability is less than 5000 nano-darcies.