

## **N-SEAL**<sup>™</sup>

Lost Circulation Material

| Description              | N-SEAL <sup>™</sup> acid soluble lost circulation material is specially formulated,<br>extrusion-spun mineral fiber. Due to its solubility in weak acids, N-SEAL<br>lost circulation material is easily removed from production zones.   |  |                                  |
|--------------------------|--|--|----------------------------------|
| Applications/Functions   | N-SEAL lost circulation material can be used as an additive for loss of circulation in concentrations up to 70 lb/100 gallons (86 kg/m <sup>3</sup> ).   |  |                                  |
| Advantages               | <ul> <li>NSF/ANSI Standard 60 certified</li> <li>Acid soluble</li> <li>Can be easily wetted</li> <li>Inorganic and non-fermenting</li> </ul>   |  |                                  |
| Typical Properties       | <ul><li> Appearance</li><li> Specific gravity</li></ul>  | Gray to white fib<br>2.6                             | er                               |
| Recommended<br>Treatment | <ul> <li>N-SEAL lost circulation material can be added directly through the hopper.</li> <li>For normal treatment to the active system, add 5-20 lb/100 gallons drilling fluid (6-24 kg/m<sup>3</sup>)</li> <li>As a pill, add 20-70 lb/100 gallons of drilling fluid (24-86 kg/m<sup>3</sup>)</li> <li>N-SEAL lost circulation material is 95% acid soluble. To dissolve 1 lb of N-SEAL lost circulation material treat with either:</li> <li>1-2 lb AQUA-CLEAR<sup>®</sup> MGA modified granular acid (1-2 kg/kg) or</li> <li>0.5-1 gal of 10% HCl/5% Acetic acid blend (1-2 liters/kg)</li> </ul> |  |                                  |
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|                          |  |  |                                  |
| Packaging                | N-SEAL lost circulation material is packaged in 30-lb (14 kg) multiwall paper bags.  |  |                                  |
| Availability             | N-SEAL lost circulation material can be purchased through any Baroid<br>Industrial Drilling Productgs Retailer. To locate the Baroid IDP retailer<br>nearest you contact the Customer Service Department in Houston or your<br>area IDP Sales Representative.<br>Baroid Industrial Drilling Products<br>Product Service Line, Halliburton<br>3000 N. Sam Houston Pkwy E.<br>Houston, TX 77032  |  |                                  |
|                          |  |  |                                  |
|                          | Customer Service<br>Technical Service  | (800) 735-6075 Toll Free<br>(877) 379-7412 Toll Free | (281) 871-4612<br>(281) 871-4613 |

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