DynaRed™ Fiber

DynaRed™ Fiber is a proprietary micro-cellulosic fiber for use in seepage loss control and other lost circulation needs. The product is available in fine, medium and coarse grades. DynaRed™ Fiber unlike other seepage control materials has minimal effects on rheological properties. DynaRed™ fiber exhibits excellent return permeabilities.

Advantages

- May be mixed rapidly through the mud hopper
- Does not require bypassing of most solids control equipment
- Seals off depleted zones without excessive build up of wall cake
- Does not need addition of a wetting agent to go into oil based fluids
- Is not treated with a wetting agent so it may be used in water based fluids
- Unlike competitive materials does not appreciably increase drilling fluid rheology
- Does not readily degrade due to shear
- Resistant to attack by bio-organisms
- Works in drilling fluids of any pH
- Compatible with other common lost circulation materials
- May be used in water base mud

Cost

The excellent return permeability and rheological properties which minimize the need for excessive dilution make DynaRed fiber a superior, economical additive for seepage and lost circulation applications

Mud Types

All know water-based and oil-based muds

Mixing Requirements

May be mixed rapidly through the rig hopper

Handling

For specific instructions refer to MSDS information or as illustrated on product containers

Packaging

25-pound (11.3 kg), multilayered paper sacks (48 bags to a pallet)

<table>
<thead>
<tr>
<th>Application</th>
<th>Material Needed (Fine)</th>
<th>Material Needed (Medium &amp; Coarse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seepage control material</td>
<td>3.0 to 6 ppb (9.0 to 17.0 kg/m³)</td>
<td>Mix 2.0 to 10 ppb (6.0 to 28.5 kg/m³)</td>
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<tr>
<td>Seal off depleted sands</td>
<td>4.0 to 8 ppb (11.5 to 23.0 kg/m³)</td>
<td>Mix 4.0 to 10 ppb (11.5 to 28.5 kg/m³)</td>
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<tr>
<td>Lost circulation pill</td>
<td>25 to 50 ppb (71.0 to 142.0 kg/m³) Suggested pill size is 25 to 50 bbls (4.0 m³ to 8.0 m³)</td>
<td>Mix 25.0 to 60.0 ppb (71.0 to 100.0 kg/m³) Suggested pill size is 25 to 50 bbls (4.0 m³ to 8.0 m³)</td>
</tr>
<tr>
<td>Lower API filtrate</td>
<td>2.0 to 6 ppb (6.0 to 17.0 kg/m³)</td>
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</tbody>
</table>

*For additional information see the “Lost Circulation Guide” or “The Engineered Lost Circulation Materials” of Drilling Specialties

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Drilling Specialties Company does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.