QMAXPLUG

Description

QMAXPLUG is a one-sack blend, heat activated cross-link polymer. Consists of a cross-linking agent, a blend of high molecular weight polymer and fibers. The product produces a rigid, robust gel structure.

Applications

QMAXPLUG was developed for sealing high permeable and fractured formations when experiencing mud losses. It can also be used as a total shut-off squeeze treatment that effectively seals off water and gas and existing perforations for abandonment or re-entry.

The cross-linking action is a function of temperature. For temperatures below 100°F (38°C), an accelerator is required. For temperatures above 125°F (52°C), a delaying agent is required. QMAXPLUG has a high viscosity thus enabling the polymer to stay within the loss zone targeted.

It can be used in water-based fluids as well as in oil-based fluids.

Features and Benefits

- Effectively seals fractured, vugular, weak, flowing and over pressured formations
- Can be pumped through the bit, mud motors and MWD/LWD tools
- Can be circulated around the BHA without the risk of stuck pipe
- Develops minimal compressive strength, eliminating the risk of side track
- Single sack, pre-blended product and is designed for ease of use.

Typical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Brown - Tan</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Specific Gravity 68°F (20°C)</td>
<td>1.2</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>

Recommended Treatment

QMAXPLUG is mixed into water at a typical concentration of 40 lb/bbl (114 kg/m³). Pilot testing is recommended and concentrations from 20 lb/bbl (57 kg/m³) could work. The consistency of the cross-linked plug will range from a solid plug to a rubbery plug that will move and flex with the pump rates. Penetration into the thief zone will not be hindered with any concentrations. The use of a silicone based defoamer could be required while mixing it.

Safety and Handling

Prior to using this product, refer to the safety data sheet for information on use of personal protective equipment, safe handling, storage, transport, and disposal.

Packaging

QMAXPLUG is available in 40 lb (22.7 kg) bags.