TBA-110™ Diverting Agent

TBA-110™ diverting agent temporarily protects producing zones during workover operations. It allows operators to treat zones with permeability differentials by separating the total treatment volume into stages. TBA-110 diverting agent has a wide particle-size distribution (0.003 to 0.25 in.). The larger particles bridge on the zone, and the smaller particles adhere to the larger particles, forming a low-permeability bridge.

Applications

TBA-110 diverting agent will bridge a 3/8-in. perforation or slot or a fracture as wide as 0.32 in. At a concentration of 1 lb of diverting agent per gallon of viscous carrier fluid, approximately 16 lb of TBA-110 diverting agent will bridge and seal a 3/8-in. perforation. At a concentration of 1.5 lb/gal, 9 lb of diverting agent is usually sufficient for sealing a 3/8-in. perforation.

When used to bridge and seal an open hole, approximately 5 lb of TBA-110 diverting agent per square foot of the open hole is required. When used to bridge on the formation behind the casing by passing through the perforations, the TBA-110 agent concentration should not exceed 3/4 lb/gal.

TBA-110 diverting agent should not be used to treat zones that are not producing water unless cleanup will be performed with water, a dilute acid (2 to 5%), or brine.

Features

Because TBA-110 diverting agent is water-soluble, the carrier fluid should be a gelled saturated-salt solution or an emulsified saturated-salt solution. AF-61 emulsifier is recommended for preparing the emulsified saturated-salt solution.

TBA-110 diverting agent exhibits reduced solubility in hydrochloric acid (HCl). It cannot be used in hydrofluoric acid (HF) because secondary precipitation will occur.

Benefits

TBA-110 diverting agent can provide the following benefits:

- It helps distribute treating fluids uniformly throughout a single zone or from one zone to another.
- It helps control fracturing fluids, allowing operators to obtain multiple fractures or initiate a fracture in a preferred zone.
- TBA-110 diverting agent is not oil-soluble and does not degrade.
- It can be used at any bottomhole temperature (BHT).

TBA-110™ Diverting Agent—Product Specifications

<table>
<thead>
<tr>
<th>Part No. (50-lb bag)</th>
<th>100001581</th>
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</thead>
<tbody>
<tr>
<td>Form</td>
<td>White, solid crystals</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.170</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>92.50 lb/ft³</td>
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<tr>
<td>pH</td>
<td>6.7 to 7.3</td>
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Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.