Cementing

**CleanBore A™ Surfactant**

The CleanBore system consists of four fluids that help provide quick and effective cleanout of oil-based mud (OBM) so that perforating or production in completion operations can begin. The following fluids are used in the system:

- spacer pill
- gel pill
- brine pill
- solvent pill

CleanBore A™ surfactant is added to the spacer pill to enhance the cleanout of oil substrates through an ultra-low interfacial tension. The addition of the surfactant also helps prevent the formation of highly viscous emulsions that could affect fluid transport and increase pumping pressure.

**Features**

CleanBore A surfactant is nonionic and made from natural-based alcohols and starch. It is environmentally friendly and biodegradable. Because it does not have a cloud point, it can be used in wellbore temperature ranges from 80° to 400°F.

**Benefits**

When used with the CleanBore system, CleanBore A surfactant provides the following benefits:

- It helps leave the pipe and formation in a water-wet condition.
- It is applicable over a wide temperature range.
- It is environmentally friendly.

<table>
<thead>
<tr>
<th>CleanBore A™ Surfactant—Product Properties</th>
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<tbody>
<tr>
<td><strong>Part No. (5-gal can)</strong></td>
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<tr>
<td><strong>Part No. (52-gal drum)</strong></td>
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<tr>
<td><strong>Form</strong></td>
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<tr>
<td><strong>Specific Gravity</strong></td>
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<tr>
<td><strong>Bulk Density</strong></td>
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**HALLIBURTON**
For more information on the benefits CleanBore A™ Surfactant can bring to your cementing operations, contact your local Halliburton representative.