BARABRINE® SI scale inhibitor is designed to prevent alkaline earth metal scale deposition in calcium and zinc brines. Scale prevention helps permit higher reservoir productivity, minimize production downtime and reduce the risk of localized corrosion.

Applications / Functions

- BARABRINE SI scale inhibitor is designed to work in all brines that contain zinc to help prevent the deposition of scale
- BARABRINE SI scale inhibitor is specifically formulated to work with BARACOR® 450 corrosion inhibitor to prevent corrosion cell formation on unprotected metal exposed to high density brines.
- BARABRINE SI scale inhibitor exhibits the threshold effect in which large numbers of multivalent cations are kept in solution by a small concentration of an inhibitor. The threshold effect exhibited by BARABRINE SI scale inhibitor helps prevent the initial scale deposition on unprotected metal
- BARABRINE SI scale inhibitor remains effective long enough to allow a companion product, BARACOR 450 corrosion inhibitor, to fully coat the clean metal surface and helps prevent long term corrosion

Advantages

- Allows clean coating of corrosion inhibitor onto metal surfaces
- Easily added to high density brines
- Low levels of use (0.1% by volume)
- No flocculation or precipitation of scale inhibitor product
- Low pour point allows use in cold climates

Typical Properties

- Appearance: Amber liquid
- Flash point, PMCC >: 200°F
- Flash point, PMCC >: 93.3°C
- pH, (1% solution): 1.5
- Pour point: 10°F
- Pour point: -12°C
- Specific gravity: 1.36
- Kinematic viscosity: 20 to 40 cps

Recommended Treatment

BARABRINE SI scale inhibitor 0.1% by volume

Note: To be used only in conjunction with BARACOR 450 corrosion inhibitor

BARACOR 450 corrosion inhibitor 0.2-0.4% by weight
BARABRINE SI scale inhibitor is packaged in 55-gal (208-l) drums containing approximately 572-lb (259-kg) net weight.

<table>
<thead>
<tr>
<th>Brine density, lb/gal</th>
<th>Inhibitor</th>
<th>Temperature, °F (°C)</th>
<th>Corrosion rate, mpy</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3 (1953kg/m³)</td>
<td>No inhibitor</td>
<td>350 (185)</td>
<td>43.7</td>
<td>19.8</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>16.3 (1953kg/m³)</td>
<td>BARACOR 450</td>
<td>350 (185)</td>
<td>2.3</td>
<td>5.5</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>16.3 (1953kg/m³)</td>
<td>BARACOR 450+</td>
<td>350 (185)</td>
<td>0.9</td>
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<td>0.3</td>
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<tr>
<td>17.3 (2073kg/m³)</td>
<td>No inhibitor</td>
<td>350 (185)</td>
<td>68.4</td>
<td>31.2</td>
<td>14.1</td>
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</tr>
<tr>
<td>17.3 (2073kg/m³)</td>
<td>BARACOR 450</td>
<td>350 (185)</td>
<td>23.9</td>
<td>9.8</td>
<td>7.9</td>
<td></td>
</tr>
<tr>
<td>17.3 (2073kg/m³)</td>
<td>BARACOR 450+</td>
<td>350 (185)</td>
<td>3.7</td>
<td>5.4</td>
<td>5.3</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **Brine:** CaBr₂/ZnBr₂: 20 cc brine/in² coupon
- **BARABRINE SI:** 0.1% by volume
- **BARACOR 450:** 0.2% by weight
- **Coupon:** Carbon Steel 1010

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Because the conditions of use of this product are beyond the seller's control, the product is sold without warranty either express or implied and upon condition that purchaser make its own test to determine the suitability for purchaser's application. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged. Except for such replacement, seller is not liable for any damages caused by this product or its use. The statements and recommendations made herein are believed to be accurate. No guarantee of their accuracy is made, however.

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