Silbreak* 327

Description
Silbreak 327 silicone demulsifier is based on a modified polydimethylsiloxane and contains no halogens. Silbreak 327 silicone demulsifier is an excellent candidate to consider for use to combine effective demulsification and foam control performance in crude oil and natural gas separators.

Key Features and Benefits
- Powerful demulsification effect, particularly when combined with polyols
- Significant foam control effect in gas oil separators
- Effective at low dosage levels

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>–</td>
<td>Clear, colorless to slightly amber liquid</td>
</tr>
<tr>
<td>RSN(^{(1)})</td>
<td>–</td>
<td>11.5(^{(1)}) or 7.4(^{(2)})</td>
</tr>
<tr>
<td>Density at 20°C</td>
<td>g•cm(^{-3})</td>
<td>0.870</td>
</tr>
<tr>
<td>Viscosity at 20°C</td>
<td>mm(^{2})•s(^{-1})</td>
<td>85</td>
</tr>
<tr>
<td>Flash Point Pensky-Martens Closed Cup ASTM D-93</td>
<td>°C</td>
<td>81</td>
</tr>
<tr>
<td>Solubility</td>
<td>–</td>
<td>Higher alcohols and aromatic hydrocarbons</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Established using toluene/tetrahydrofuran solution  
\(^{(2)}\) Established using toluene/dimethoxyethane solution
The RSN value was determined experimentally.

Typical data are average data and actual values may vary. Typical data shall not be used as product specifications.

Potential Applications
As with many Silbreak demulsifiers, Silbreak 327 silicone demulsifier is not intended to replace organic demulsifiers. Rather it should be blended with organic demulsifiers at levels ranging from 2 to 25% to boost the effect or clean up the separated water.

Silbreak 327 silicone demulsifier has shown strong synergies with organic polyols. At levels as low as 2%, it can contribute to the clarity of the separated water. It can be effective on light and medium crudes, and when combined with polyols, it has shown demulsification activity at lower temperatures.

Silbreak 327 silicone demulsifier is water incompatible and has only limited solubility in crude oil. This property can offer a distinct performance advantage in non-polar or slightly polar media such as crude oil, refined petroleum products or foaming dry-cleaning solutions that may contain low concentrations of aqueous soaps. In such cases, Silbreak 327 silicone demulsifier may be added directly to the foaming medium either on its own or as part of a demulsifier formulation to obtain foam control. Dosage levels will depend on the level of foam control needed and the gas/oil ratio. Typical levels range between 5 and 50 ppm of a 30% solution.

Solvents recommended for use with Silbreak 327 silicone demulsifier include aromatics and alcohols. Dilutions should be used within a few days to avoid product and performance degradation. Appropriate care should be taken when using flammable solvents.

Patent Status
Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage
Silbreak 327 silicone demulsifier is best stored at temperatures between 0°C and 35°C.
to facilitate ease of handling, but storage at lower or higher temperatures will not affect subsequent defoaming performances.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations
Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Contact Information
For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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