

Silbreak™ 1324

Silbreak* 1324

Description

Silbreak 1324 silicone demulsifier is an excellent candidate to consider for use in efficiently breaking water-in-oil emulsions. It is based on a modified polysiloxane and contains no solvent. Silbreak 1324 silicone demulsifier can provide exceptional crude oil demulsification performance either on its own or in combination with non-silicone organic demulsifiers, to which it may deliver a remarkable boost in the speed of separation. In laboratory tests, Silbreak 1324 silicone demulsifier has exhibited these characteristics at temperatures as low as 20°C.

Demulsifiers can be very selective depending on the crude that is to be demulsified. It is therefore recommended that bottle tests be run before finalizing a demulsification formulation.

Key Features and Benefits

- Fast separation of water from crude oil, particularly during the initial phase of separation
- Low treatment rates when combined with non-silicone demulsifiers
- Potential overall cost reduction due to lower dosages
- Sharp and clear oil/brine interface; reduced sludge
- Clear water phase
- Very limited quantity of residual water rests in the separated crude
- Essentially free of phenolic derivatives
- Can be easily blended with organic demulsifiers

Typical Physical Properties

| | |
|--|-------------------|
| Polarity (HLB) | 12 |
| RSN | 11.6 |
| Viscosity cSt, 20°C | 2400 |
| Density g/ml, 20°C | 1.02 |
| Molecular Weight | 20000 |
| Solubility in Water | 1%, dispersible |
| Preferred Solvent | Xylene, aromatics |
| Flash Point (of the active ingredient) Close Tag Cup, ASTM D 93, (°C) | 98 |

The information shown above on the polarity and molecular weight may be useful when blending with other materials is desired. The polarity is based on the best estimate of HLB as calculated from the solubility parameters (Barton, A.F.M. Handbook of Solubility Parameters and Other Cohesion Parameters, Boca Raton: CRC Press, 1983) based on the composition of Silbreak 1324 silicone demulsifier.

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.

Product Usage

Silbreak 1324 silicone demulsifier can be introduced into the stream of emulsified crude oil as a solution in an organic solvent. We recommend xylene or various aromatics but other solvents may also be used.

Blending with commonly used organic demulsifiers can be an equally effective way of using Silbreak 1324 silicone demulsifier. In such cases, Silbreak 1324 silicone demulsifier can be used at levels as high as 25% of the final formulation, although it may provide benefits at levels as low as 5%. In some cases a compatibilizing solvent may be necessary.

Silbreak 1324 silicone demulsifier has shown significant activity, particularly in heavy crudes, such as those found in pits and slops. Its blends with polyol demulsifiers may exhibit high levels of synergy and result in particularly clean water and sharp, soft interface. We recommend that water soluble EO/PO polyol demulsifiers be first

evaluated followed by lower RSN versions.

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 1324 silicone demulsifier should be stored between 0°C and 40°C to facilitate ease of handling; storage at lower or slightly higher temperatures (do not exceed 50°C) should not affect demulsification properties so long as the product has been stored in the original unopened package and is still within the stated shelf life.

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

Email

commercial.services@momentive.com

Telephone

| Americas | Latin America | EMEAI- Europe, Middle East, Africa & India | ASIA PACIFIC |
|--------------------------------|--|--|--|
| +1 800 295 2392 Toll free* | Brazil +55 11 4534 9650 Direct Number | Europe +390510924300 Direct number | China 800 820 0202 Toll free +86 21 3860 4892 Direct number |
| +704 805 6946 Direct Number | Mexico +52 55 2169 7670 Direct Number | India, Middle East & Africa + 91 44 71212207 Direct number* | Japan +81 3 5544 3111 Direct number |
| *All American countries | | *All Middle Eastern countries, Africa, India, | Korea +82 2 6201 4600 |

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