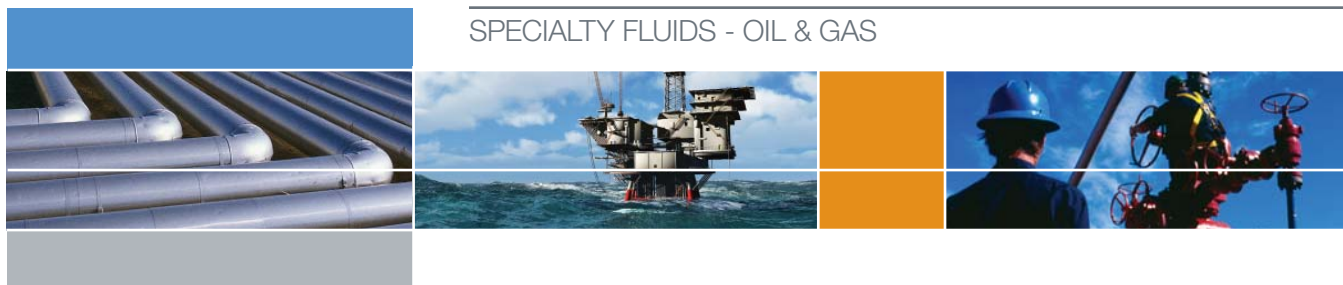


SILBREAK* 504

silicone demulsifier

SPECIALTY FLUIDS - OIL & GAS



Silbreak 504 silicone demulsifier is an excellent candidate to consider for use in demulsifying heavy crudes under extreme conditions such as those experienced in heavy crudes stabilized by fine solids or sand or those recovered through EOR, such as polymer flooding.

Key Features and Typical Benefits

- powerful demulsification effect, particularly when combined with polyols
- effective in demulsifying paraffinic crudes
- helps achieve clean separated water and good interface
- effective at low dosage levels

Typical Physical Properties		
Property	Unit	Value
Appearance		Clear to hazy liquid
RSN		7.4 ⁽¹⁾
Color	GVS	1
Density at 20°C	g/ml	1.007
Viscosity, 25°C, #3/6	cSt	2500
Flash Point Pensky-Martens Closed Cup ASTM D-93	°C	115.6
Solubility		Higher alcohols and aromatics

(1) The RSN (Relative Solubility Number) value was determined experimentally based on the method of J. Wu et al. Colloids and Surfaces A: 232 (2004) 229-237.

Typical data are average data and actual values may vary.

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting Momentive sales office.

SILBREAK* 504 silicone demulsifier

Potential Applications

As with many Silbreak silicone demulsifiers, Silbreak 504 silicone demulsifier is not intended to replace organic demulsifiers. Rather it should be blended with organic demulsifiers at levels ranging from 2 to 10% to boost the demulsification effect or clean up the separated water.

In certain cases a high concentration of Silbreak 504 silicone demulsifier may lead to overtreatment. In order to avoid this, we recommend that the amount of Silbreak 504 silicone demulsifier added does not exceed 2-5% of the weight of the actives of the organic demulsifiers. Silbreak 504 silicone demulsifier generally shows strong synergies with organic polyols. At levels as low as 2%, it can contribute to reducing BS&W or improving the clarity of the separated water. It is particularly effective on heavy crudes of less than 25° API gravity.

Aromatic solvents are recommended for use with Silbreak 504 silicone demulsifier. Appropriate care should be taken when using flammable solvents.

General Instructions for Use

1. Prepare your current demulsifier formulation.
2. Prepare a solution of Silbreak 504 silicone demulsifier with the same solvent content % as that of step 1 above.
3. Prepare a blend (or co-inject) 100 parts of the formulation from step 1 and 2.5 parts of the silicone solution from step 2.
4. Repeat step 3, but with 100 parts of the formulation from step 1 and 5 parts of the silicone solution from step 2.
5. Repeat step 3, but with 100 parts of formulation from step 1 and 10 parts of the silicone solution from step 2.

DO NOT start with step 5, as Silbreak 504 silicone demulsifier can easily overtreat. In case it is impossible to dose 2.5 parts, increase the dilution in step 2, and adjust accordingly.

Patent Status

Technical subject matter in this publication is described and protected by one or more pending US patent applications and foreign counterparts.

Product Safety, Handling and Storage

Silbreak 504 silicone demulsifier is best stored at temperatures between 0°C and 35°C to facilitate ease of handling. However, storage at lower or higher temperatures will not typically affect the subsequent demulsification performance of Silbreak 504.

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials products 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.

SILBREAK* 504 silicone demulsifier

Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products.

<u>Location</u>	<u>Emergency Service Provider</u>	<u>Emergency Contact Number</u>
Mainland U.S., Puerto Rico	CHEMTREC	1-800-424-9300
Alaska, Hawaii	CHEMTREC	1-800-424-9300
Canada	CHEMTREC	1-800-424-9300
Europe, Israel	NCEC	+44 (0) 1235239670
Middle East	NCEC	+44 (0) 1235239671
Asia Pacific (except China)	NCEC	+44 (0) 1235239670
China	NCEC	+86-10-5100-3039
Latin America (except Brazil)	NCEC	+44 (0) 1235239670
Brazil	SOS Cotec	08000111767 or 08007071767
All other locations world wide	NCEC	+44 (0) 1235239670
At sea	Radio U.S. Coast Guard in U.S. waters NCEC in International waters	+44 (0) 1235239670

For Health related calls, contact Momentive Performance Materials at +1-518-233-2500 (English only).

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

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