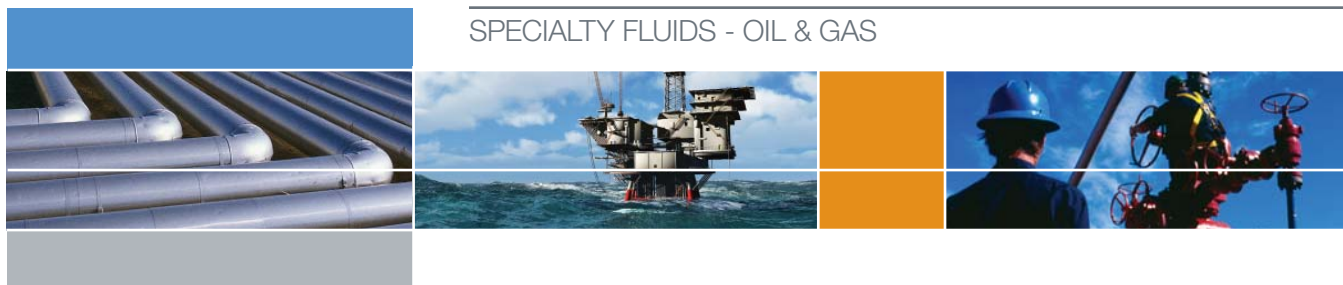


SILBREAK* 503

silicone demulsifier

SPECIALTY FLUIDS - OIL & GAS



Silbreak 503 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
- very fast water drop
- effective at low dosage levels

Typical Physical Properties

Property	Unit	Value
Appearance		Clear to hazy liquid
RSN		3.2 ⁽¹⁾
Color	GVS	1
Density at 20°C	g/ml	0.988
Viscosity, 25°C, #3/6	cSt	1500
Flash Point Pensky-Martens Closed Cup ASTM D-93	°C	112.8
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* 503 silicone demulsifier

Potential Applications

As with many Silbreak silicone demulsifiers, Silbreak 503 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 503 silicone demulsifier may lead to overtreatment. In order to avoid this, we recommend that the amount of Silbreak 503 silicone demulsifier added does not exceed 2-5% of the weight of the actives of the organic demulsifiers. Silbreak 503 silicone demulsifier generally shows strong synergies with organic polyols and phenolic resins. At levels as low as 2%, it can contribute to the water separation rate or improve BS&W. It is particularly effective on heavy crudes of less than 25° API gravity.

Aromatic solvents are recommended for use with Silbreak 503 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 503 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 503 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 503 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 503.

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* 503 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.

Customer Service Centers

Worldwide Hotline

T +1 800 295 2392 / +1 607 786 8131
F +1 607 786 8309

North America

cs-na.silicones@momentive.com

Silicones – Fluids, Urethane Additives, Silanes, Specialty Coatings, RTVs and Elastomers

T +1 800 523 5862 / +1 800 334 4674
F +1 304 746 1654 / +1 304 746 1623

Consumer Sealants/ Construction Sealants and Adhesives

T +1 877 943 7325
F +1 304 746 1654

Latin America

cs-la.silicones@momentive.com

South America

T +55 11 4534 9650
F +55 11 4534 9660

Mexico and Central America

T +52 55 2169 7670
F +52 55 2169 7699

Europe, Middle East, Africa and India

cs-eur.silicones@momentive.com

T +00 800 4321 1000 / +40 21 3111848

Pacific

cs-ap.silicones@momentive.com

China

T +800 820 0202 / +86 21 3860 4892

Japan

T +0120 975 400 / +81 276 20 6182
F +81 276 31 6259

Korea

T +82 2 6201 4600
F +82 2 6201 4601

Malaysia

T +60 3 9206 1555
F +60 3 9206 1533

Thailand

T +66 2207 3456
F +66 2207 3488

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22 Corporate Woods Boulevard
Albany, NY 12211 USA
+1 800 295 2392
+1 607 786 8131
momentive.com