

SILBREAK* 600

silicone demulsifier

SPECIALTY FLUIDS - OIL & GAS



Silbreak 600 silicone demulsifier for Slop Oil Demulsifier and Foamant is an excellent candidate to consider to aid the separation of emulsions, particularly those related to slop oils, those found in mining operations or those produced during crude oil extraction. It is best used as a booster, in small concentrations, in typical organic demulsifier formulations.

Silbreak 600 silicone demulsifier can also be an effective foamer for water and polar solvent-based systems. Foams made from Silbreak 600 silicone demulsifier solutions are generally very stable and insensitive to oil contaminations.

Silbreak 600 silicone demulsifier is based on a low molecular weight polydimethylsiloxane modified with organic groups. Because of its molecular architecture, it typically shows remarkable surface activity in both oil and water based systems. Aqueous dispersions of Silbreak 600 silicone demulsifier can act as an effective wetting agent on solid surfaces.

Key Features and Typical Benefits

- can offer powerful demulsification effect with slop oils, particularly when combined with polyols and other organic demulsifiers
- can form very stable foams in water and polar liquid based systems
- effective wetting agent
- effective at low dosage levels

Typical Physical Properties

Property	Unit	Value
Appearance	–	Straw colored
RSN ⁽¹⁾	–	20
Density at 25°C	g·cm ⁻³	1.007
Viscosity at 25°C	cSt	20
Pour Point	°C	2
Flash Point Pensky-Martens Closed Cup ASTM D-93	°C	116
Solubility	–	Soluble in aromatic hydrocarbons, methanol isopropanol, acetone, higher alcohols; dispersible in water (steam condensate)

1) Established using toluene/dimethoxyethane solution as described in the reference J. Wu *et al.* Colloids and Surfaces A: 232 (2004) 229-237.

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

SILBREAK* 600 silicone demulsifier

How to Use

Demulsification

As with many Silbreak demulsifiers, Silbreak 600 silicone demulsifier is not intended to replace organic demulsifiers. Rather, it should be blended in with them at levels ranging from 2 to 25% to boost the effect or clean up the separated water. Synergistic blends are possible with glycols, particularly EO/PO block copolymers.

It is recommended that water based dispersions of Silbreak 600 silicone demulsifier should not be stored in conditions of extremes of pH as *e.g.*, in solids wetting, acid jobs or in certain mining emulsions. In some cases, the transient nature of Silbreak 600 silicone demulsifier at extremes of pH may be advantageous as it will be eliminated from the system. In all cases, we recommend that studies be undertaken to ascertain the performance of the formulation over the anticipated duration of the application.

Foam Stabilization

Silbreak 600 silicone demulsifier can be effective at greatly reducing the surface tension of water and can therefore form particularly stable foams. In a typical Ross Miles test (ASTM D1173-53) that records the foam height in millimetres of foam produced after the test solution is poured from a standard height, Silbreak 600 silicone demulsifier recorded:

0.1 wt% Silbreak 600 silicone demulsifier		1.0 wt% Silbreak 600 silicone demulsifier	
Initial	5 min	Initial	5 min
33	29	62	58

Solvents recommended for use with Silbreak 600 silicone demulsifier include aromatics, alcohols and water (steam condensate). 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 600 silicone demulsifier is best stored at temperatures between 5°C and 35°C to facilitate ease of handling, but storage at reasonably lower or higher temperatures should not typically affect its subsequent performance.

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* 600 silicone demulsifier

Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC) and CareChem24 International also maintain an around-the-clock emergency service for all chemical products:

<u>Location</u>	<u>Momentive Performance Materials Products</u>	<u>All Chemical Products</u>
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CHEMTREC: 800.424.9300
Europe	+518.233.2500 (Albanian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Slovak, Spanish, Swedish, Turkish, Ukrainian)	+44.(0)208.762.8322 (UK)
Middle East, All countries, except Israel	+518.233.2500	+961.3.487.287 (Lebanon)
Middle East, Israel	+518.233.2500	+44.(0)208.762.8322 (UK)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.	

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

CUSTOMER SERVICE CENTERS

North America	E cs-na.silicones@momentive.com		
	• Specialty Fluids	T +1.800.523.5862	F +1.304.746.1654
	• UA, Silanes and Specialty Coatings	T +1.800.334.4674	F +1.304.746.1623
	• RTVs and Elastomers	T +1.800.332.3390	F +1.304.746.1623
	• Consumer Sealants & Construction Sealants and Adhesives	T +1.877.943.7325	F +1.304.746.1654
Latin America	E cs-la.silicones@momentive.com		
	• Argentina & Chile	T +54.11.4862.9544	F +54.11.4862.9544
	• Brazil	T +55.11.4534.9650	F +55.11.4534.9660
	• Mexico & Central America	T +52.55.2169.7670	F +52.55.2169.7699
	• Venezuela, Ecuador, Peru, Colombia & Caribbean	T +58.212.285.2149	F +58.212.285.2149
Europe, Middle East, Africa and India	E cs-eur.silicones@momentive.com	T +00.800.4321.1000 T +40.21.3111848	
Pacific	E cs-ap.silicones@momentive.com		
	• China	T +1.800.820.0202 or T +86.21.3860.4892	F +86.21.5079.3725
	• Japan	T +0120.975.400 or T +81.276.20.6182	F +81.276.31.6259
	• Korea	T +82.2.6201.4600	F +82.2.6201.4601
	• Malaysia	T +60.3.9206.1532	F +60.3.9206.1533
	• Thailand	T +662.207.3456	F +66.2207.3488
Worldwide Hotline		T +1.607.786.8131 T +1.800.295.2392	F +1.607.786.8309

Visit us at Momentive.com



Momentive Performance Materials
22 Corporate Woods Boulevard
Albany, NY 12211

*Silbreak is a trademark of Momentive Performance Materials Inc.
Momentive is a trademark of Momentive Performance Materials Holdings LLC.
Copyright 2009-2011 Momentive Performance Materials Inc. All rights reserved.

MOM-134-137-10E-GL 04/11 Printed in U.S.A.

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC., MOMENTIVE PERFORMANCE MATERIALS USA INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS WORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS GmbH, THEIR SUBSIDIARIES AND AFFILIATES DOING BUSINESS IN LOCAL JURISDICTIONS (collectively "SUPPLIERS"), ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS' STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIERS MAKE NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SUPPLIERS' PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS AND/OR INCORPORATION CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF USE AND/OR OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS. EXCEPT AS PROVIDED IN SUPPLIERS' STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.

Each user bears full responsibility for making its own determination as to the suitability of Suppliers' materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Suppliers' products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Suppliers' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Suppliers or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.