

## Silbreak™ 1636

### Silbreak\* 1636

#### Description

Silbreak 1636 silicone demulsifier is an excellent candidate to consider for use to efficiently break water-in-oil emulsions. It is based on a modified polysiloxane that contains no halogens. Silbreak 1636 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.

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)	4
RSN	12
Viscosity cSt, 20°C	170
Density g/ml, 20°C	0.932
Silicone Molecular Weight	7000-10000
Solubility in Water (1%)	Insoluble
Preferred Solvent	2-ethylhexanol
Flash Point Tag Closed Cup, (°C)	81

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 1636 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 1636 silicone demulsifier can be introduced into the stream of emulsified crude oil as a solution in an organic solvent. We recommend 2-ethylhexanol but other solvents may also be used. Silbreak 1636 silicone demulsifier is only dispersible in aromatic solvents forming a hazy solution in xylene at a 5% concentration.

Blending with commonly used organic demulsifiers can be an equally effective way of using Silbreak 1636 silicone demulsifier. In such cases, Silbreak 1636 silicone demulsifier can be used at levels as high as 50% of the final formulation, although it may provide benefits at levels as low as 10%. In some cases a compatibilizing solvent may be necessary.

### Patent Status

Technical subject matter in this publication is described and protected by one or more of the following U.S. Patents and their foreign counterpart patents and/or patent applications: U.S. Patent Nos. 6,001,140 and 6,221,815. Other U.S. and foreign

patents and/or patent applications not listed covering the subject matter may be relevant.

여기에 포함된 어떠한 내용도 관련 특허가 없음을 의미하거나 특허 소유자의 허가 없이 특허에서 다루는 발명을 실행하기 위한 허가, 유도 또는 권고를 구성하는 것으로 해석되어서는 안됩니다.

### **Product Safety, Handling and Storage**

Silbreak 1636 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](http://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](mailto:commercial.services@momentive.com)

### **Telephone**

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

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

**THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S 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, SUPPLIER MAKES 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 ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS 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 Supplier’s 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 Supplier's 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 Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. 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 Supplier 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.

\*Silbreak™는 Momentive Performance Materials Inc.의 상표입니다.

The use of the "™" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.