Technical Data Sheet

Silbreak™ 503

Silbreak* 503

Description

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 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	cSt	112.8

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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.

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.

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

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

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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.

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