



Technical Data

DEMTROL™ 3005

Demulsifier Base

Description

DEMTROL™ 3005 Demulsifier Base is a propylene oxide/ethylene oxide (PO/EO) block copolymer, cross-linked with epoxy resins, with an approximate average molecular weight of 7,000 daltons. This demulsifier base is ideal for developing demulsifier formulations for the quick and effective separation of water from water-in-oil emulsions. DEMTROL 3005 is mostly useful in applications involving high-salinity oils, such as the material found in pre-salt regions, and it has a wide API range. The unique surfactant characteristics of this product allow its association with other demulsifier bases offered by Dow. Solvents are used during the production process of this demulsifier base, resulting in a final active content range of 80-90 percent. In addition, the solvent properties must be considered when using this product.

Features and Benefits

- Easily formulated with other Dow demulsifier bases
- Efficient performance rate in separating out water found in water-in-oil emulsions
- Increased cost-effectiveness with the ability to store lower volumes than other solvent-based material, and greater flexibility to use the solvent of choice in the final formulation
- Efficient demulsification properties that allow for efficient emulsion-breaking, leading to the optimization of the water phase quality in formulations and a more simplified final product
- Optimal oil and water separation due to a unique combination of quick and effective separation of water from water-in-oil emulsions
- Increased petroleum extraction yield with minimized aqueous phase losses due to moisturizing properties that change the emulsification characteristics

Typical Physical Properties⁽¹⁾

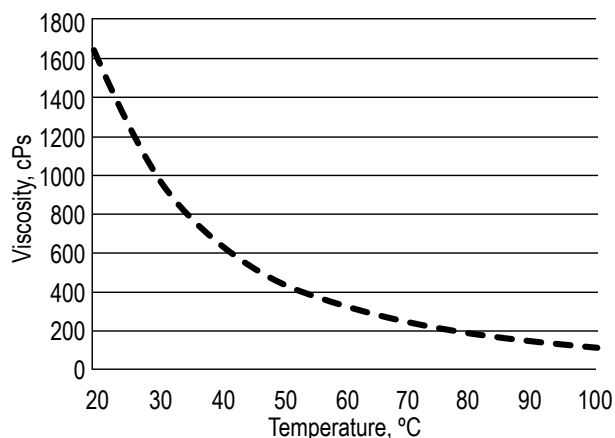
Property	Value
Appearance, Room Conditions ⁽²⁾	Yellow to brown viscous liquid
RSN ⁽³⁾	5
Solubility in Water, Room Conditions	Negligible
Hygroscopicity, Room Conditions	Low
Density, lb/gal, 77°F	8.27
Density, g/cm ³ , 25°C	0.99
Vapor Pressure @ 25°C, mm Hg	<1
Pour Point, °C	~ 15
Flash Point, °C	28
% Active	80-90

(1) Typical properties. Not to be construed as specifications.

(2) Room conditions are considered to be 25°C and 1 atm.

(3) The relative solubility number (RSN) was determined by titrating water in a solution containing 1 g of DEMTROL™ demulsifier and 30 ml toluene (2.6 vol%) and ethylene glycol methyl ether (97.4 vol%). RSN is reported as the volume of water needed to make a solution turbid or cloudy.

Viscosity versus Temperature DEMTROL™ 3005 Demulsifier



Storage and Packaging

When stored in the original unopened containers, DENTROL™ 3005 Demulsifier Base has a usable life of 24 months from the date of production.

DEMTROL crude oil demulsifier bases are available in a variety of container sizes. Contact your local Dow sales representative for information about container sizes available in your area.

Product Stewardship

When considering the use of any Dow products in a particular application, you should review the latest Material Safety Data Sheets from Dow and ensure that they are intended for safe use. For Material Safety Data Sheets and other product safety information, contact Dow. Before handling any other products mentioned in the text, you should obtain available product safety information and take necessary steps to ensure safety of use.

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Note: This guide is designed as a general product overview. Please contact your local Dow representative for up-to-date, detailed technical information including registrations and use limitations and to discuss individual applications or requirements.

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