BELSIL® WO 5001

Silicone Fluids, functional (INCI)

BELSIL® WO 5001 is a non-ionic emulsifier suitable for water in oil (W/O) and water in silicone (W/Si) formulations. BELSIL® WO 5001 is based on a polymeric polydimethylsiloxane which is functionalized with a hydrophilic polyglucoside as well as with alkyl groups. Its active ingredient is supplied as an approximately 30 % solution in Isohexadecane. The silicone polyglucoside contained in this solution is a nonionic surfactant with an HLB of aproximately 6 - 7.

INCI Isohexadecane, Caprylyl Dimethicone Ethoxy Glucoside

Properties

BELSIL® WO 5001 was specifically designed as an emulsifier for water-in-oil (W/O) or water-in-silicone (W/Si) products. However, together with suitable co-emulsifiers the product might also be used for the preparation of oil-in-water (O/W) formulations. Using BELSIL® WO 5001 as an emulsifier allows to formulate not only high viscose creams, but also enables stable low-viscous lotions.
BELSIL® WO 5001 significantly improves the texture of W/O formulations. Typically W/O emulsions are associated with a heavy and rich skin feel. Using BELSIL® WO 5001 improves the spreadability and texture of W/O formulations yielding rather light formulations feeling almost like W/O (water in oil) formulations.
A special feature of BELSIL® WO 5001 is its ability to disperse pigments and inorganic UV absorbers. This is especially versatile when formulating foundations, concealers or high SPF sun care products, where well-homogenized pigments are key for the product performance.

Processing:
BELSIL® WO 5001 is typically added to the oil phase. The water phase is incorporated slowly into the oil phase, while slow homogenization with Ultra Turrax or a blade stirrer.
BELSIL® WO 5001 can be used for hot and cold emulsification processes.

Technical data

General Characteristics

Property	Condition	Value	Method
Viscosity, kinematic	25 °C	approx. 150 mm^2/s	DIN 51562
Refractive index	25 °C	approx. 1.434	DIN 51423
Active content	-	30 %	-
Appearance	-	clear to translucent, brownish liquid	-
Density	20 °C | 1013 hPa	0.8420 g/cm^3	-
Flash point	-	94 °C	ISO 3679
HLB value calculated	-	6 - 7	-
Odor	-	characteristic	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Eye Make-up
- Lip Make-up
- Make-up Foundation
- Skin Care
- Sun Care

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.
Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code BELSIL® WO 5001

For technical, quality or product safety questions, please contact:

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

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