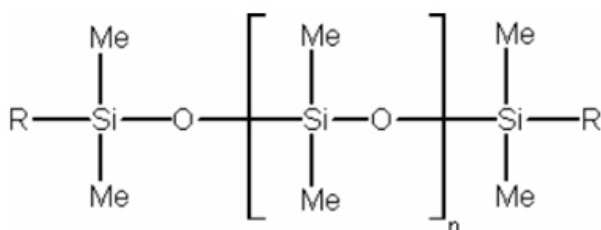


BELSIL® DM 500000

DIMETHICONE

Product description

Structural formula:



R = Me

BELSIL® DM 500000 is a linear, non-reactive, unmodified polydimethylsiloxane. It is a dimethicone with a viscosity of 500 000 mm²/s. BELSIL® DM 500000 is characterized by low surface tension and high spreading coefficient. Due to its flexible polymer backbone, this dimethicone has high permeability to gases (e.g. water, vapour, oxygen), which allows respiration of the skin.

Application

High-viscous BELSIL® DM 500000 is widely used in a diverse range of personal-care formulations. Dimethicones provide a hydrophobic, protective, but breathable barrier for the skin, imparting softness and

emolliency. They improve the water resistance of various products, such as sun screens. Simultaneously, they prevent stickiness in skin-care as well as in color-cosmetics formulations. In hair-care products, high-viscous dimethicones are among the most commonly used conditioning additives. They improve both wet and dry combability, impart humidity resistance and a soft feel to the hair, and enhance shine.

Storage

Maximum temperature allowed during storage and transportation:
50 °C

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>.

Product data

Typical general characteristics	Inspection Method	Value
Appearance		colorless, clear
Viscosity, kinematic at 25 °C	DIN 53018	approx. 500000 mm ² /s
Density at 25 °C	DIN 51757	approx. 0,97 g/cm ³
Refractive index at 25 °C		1,4037
Flash point	ISO 2592	> 320 °C
Surface tension at 25 °C		0,022 N/m
Ignition temperature (liquids)	DIN 51794	approx. 450 °C
INCI name		Dimethicone

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

Additional information

Solubility

Ingredient	BELSIL® DM 500000	Ingredient	BELSIL® DM 500000
Cyclopentasiloxane	✓	Triglycerides	
		Castor oil	-
Dimethicone		Olive oil	-
BELSIL® DM 1 Plus	✓	Wheatgerm oil	-
BELSIL® DM 10	✓	Lanolin oil	-
BELSIL® DM 350	✓		
BELSIL® DM 12500	✓	Alcohols	
BELSIL® DM 60000	✓	Octyldodecanol	-
		Propylene glycol	-
Mineral oils		Isopropanol	-
C9-13 isoparaffins	✓	Ethanol	-
Mineral oil (high-visc.)	-	Glycerin	-
Mineral oil (low-visc.)	-		
		Esters / Ester oils	
Water	-	Ethyl acetate	✓
		C12-15 alkyl benzoates	-
		Isopropyl myristate	✓
		Oleyl oleate	-

✓ = soluble (> 10%)

p = partially soluble (1 - 10%)

- = insoluble

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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

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