

# Wacker-Belsil® DM 500

Dimethicone

## Characteristics

Wacker-Belsil® DM 500 is a linear, non-reactive, unmodified polydimethylsiloxane with a viscosity of 500 mm<sup>2</sup>/s.

Wacker-Belsil DM 500 is characterized by low surface tension and a high spreading coefficient. Due to its flexible polymer backbone, dimethicones have high permeability to gases (e.g., water vapor, oxygen), which allows respiration of the skin.

## Applications

Wacker-Belsil DM 500 is widely used in a highly varied range of personal care formulations.

The medium viscosity dimethicone Wacker-Belsil DM 500 is used, for example, as solvents for high viscosity dimethicones or dimethiconols. This allows the formulator to adjust the needs of his products.

It imparts a hydrophobic, protective, but breathable barrier to the skin and improves spreading characteristics. It reduces whitening and soaping effects during rub-in and imparts lubricity, softness, and emolliency. Wacker-Belsil DM 500 enhances shine, reduces stickiness, and improves the tactile impression of personal care applications.

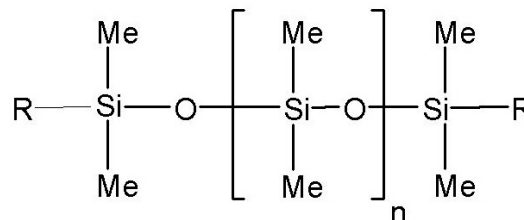
## Storage

Wacker-Belsil DM 500 has a shelf life of at least 12 months when stored between 5°C and 40°C in the

tightly closed original container. The 'Best use before end' date of each batch appears 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.

## Chemical Structure



R=Me

## Safety information

Detailed safety information is contained in each material data safety sheet, which can be obtained from our sales offices.

## Product data

Properties	Characteristics
Appearance	Clear, colorless
Physical state	Liquid
Surface tension at 25°C, approx., [mN/m]	21.1
Viscosity, approx., [mm <sup>2</sup> /s]	500
Density at 25°C, approx., [g/cm <sup>3</sup> ]	0.969
Flash point, ISO 2592, [°C]	>300
Refractive index at 25°C, approx.	1.4035
INCI name	Dimethicone

**Additional Information**

## Solubility

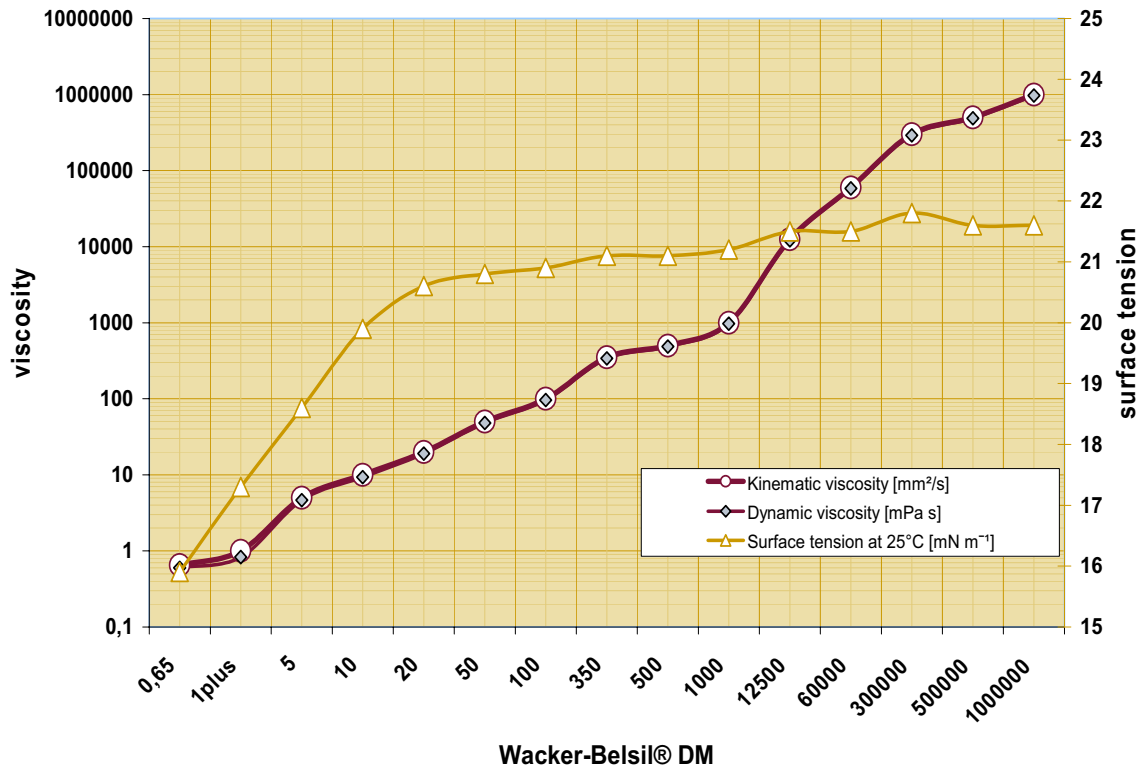
Ingredient	Wacker-Belsil DM 500	Ingredient	Wacker-Belsil DM 500
<b>Silicones</b>		<b>Triglycerides</b>	
Wacker-Belsil® CM 040	✓	Castor Oil	•
Wacker-Belsil® DM 1 plus	✓	Olive Oil	•
Wacker-Belsil® DM 10	✓	Wheatgerm Oil	•
Wacker-Belsil® DM 350	✓	Lanolin Oil	•
Wacker-Belsil® DM 12500	✓		
Wacker-Belsil® DM 60000	✓	<b>Alcohols</b>	
		Octyldodecanol	•
<b>Mineral Oil</b>		Propylene Glycol	•
C9-13 Isoparaffin	✓	Isopropanol	•
Mineral Oil, high-visc.	•	Alcohol	•
Mineral Oil, low-visc.	•	Glycerin	•
<b>Ester Oil</b>		<b>Water</b>	
Ethyl Acetate	✓		•
C12-15 Alkyl Benzoate	•		
Isopropyl Myristate	✓		
Oleyl Oleate	•		

✓ = Soluble (&gt; 10%)

P = Partially soluble (1 – 10%)

Δ = insoluble

Viscosity range of Wacker-Belsil DM fluids and their surface tension



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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 ANSI/ISO/ASQ Q9001 and ANSI/ISO 14001.

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