

# Wacker-Belsil® DM 1 PLUS

Dimethicone

## Characteristics

Wacker-Belsil® DM 1 plus is a clear, colorless fluid of low viscosity and high volatility. It is non-polar and insoluble in water but miscible with mineral oils, lower alcohols, esters, and other solvents frequently used in personal care formulation.

Due to its low heat of evaporation, Wacker-Belsil DM 1 plus evaporates from the skin without a cooling or stinging effect. The low boiling point and high vapor pressure result in rapid evaporation.

## Applications

Wacker-Belsil DM 1 plus can be used as a delivery system in antiperspirant and deodorant formulations as well as in cuticle coat products and color cosmetic compositions. Wacker-Belsil DM 1 plus acts as a solvent or carrier, helping to uniformly spread actives and pigments over the surface of hair and skin.

It provides fast drying times combined with sufficient play-time in color cosmetics applications, thereby improving rub-in properties, reducing stickiness, imparting lubricity and a smooth skin feel.

In hair care products, the solvent/carrier Wacker-Belsil DM 1 plus facilitates easy spreading of high viscosity fluids to gums, enhance wet comb-ability, and function as resin plasticizers in fixative products.

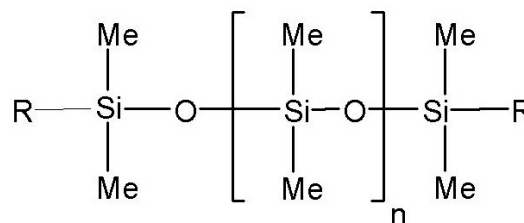
To alter drying times for specific product requirements, Wacker-Belsil DM 1 plus may be blended in all proportions with cyclomethicone and dimethicone fluids.

## Storage

Wacker-Belsil DM 1 PLUS has a shelf life of at least 12 months when stored between 10°C and 25°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



## Product data

Properties	Characteristics
Appearance	Clear, colorless
Viscosity, approx., [mm <sup>2</sup> /s]	1.0
Density at 25°C, approx., [g/cm <sup>3</sup> ]	0.83
Refractive index at 25°C approx.	1.384
Surface tension at 20°C, approx., [mN/m]	17.3
Dielectric constant at 23°C and 100 Hz, approx.	2.34
Flash point, approx., DIN 51755, [°C]	32
Boiling point, approx., [°C]	153
Ignition point, approx., DIN 51794, [°C]	350
INCI name	Dimethicone

**Additional Information**

## Solubility

Ingredient	Wacker-Belsil DM 1 plus	Ingredient	Wacker-Belsil DM 1 plus
<b>Mineral Oil</b>		<b>Emulsifier</b>	
C9-13 Isoparaffin	•	PEG-75 Lanolin Oil	•
Mineral Oil, high-visc.	✓	PEG-7 Glyceryl Cocoate	•
Mineral Oil, low-visc.	✓		
		<b>Alcohols</b>	
<b>Ester Oil</b>		Octyldodecanol	•
Ethyl Acetate	✓	Oleyl Alcohol	•
C12-15 Alkyl Benzoate	✓	Propylene Glycol	•
Isopropyl Myristate	✓	Isopropanol	•
Decyl Oleate	✓	Alcohol	•
Oleyl Oleate	✓	Glycerin	•
Ethylhexyl Methoxycinnamate	✓	PPG-5-Laureth-5	P
Ethylhexyl Salicylate	✓		
		<b>Ketones</b>	
<b>Triglycerides</b>		Benzophenone-3	P
Castor Oil	•	4-Methylbenzylidene Camphor	•
Olive Oil	✓		
Wheatgerm Oil	✓		
Lanolin Oil	•	<b>Water</b>	
			•

✓ = Soluble (> 10%)      P = Partially soluble (1 – 10%)      Δ = insoluble

**Safety information**

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

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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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