

# Wacker-Belsil® PDM 20

Trimethylsiloxyphenyl Dimethicone (proposed)

## Characteristics

Wacker-Belsil® PDM 20 is a phenyl-modified polydimethylsiloxane characterized by having a higher refractive index than dimethicone fluids (1.38-1.40). It offers clear advantages over dimethicones with regard to skin feel, sheen and compatibility with other cosmetic raw materials.

## Applications

Wacker-Belsil PDM 20 is used in all kinds of cosmetic formulations, but mostly in hair care compositions, due to their shine-enhancing benefits.

Wacker-Belsil PDM 20 reduces the stickiness of formulations containing acrylic acid polymers. It is an excellent emollient in skin care products, that imparts a very pleasant feel to the skin, and provides water-repellency.

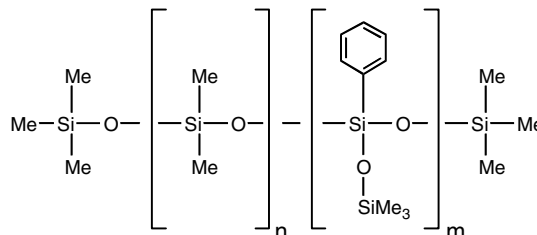
In antiperspirant formulations, phenyl-modified silicones are employed as a refractive-index match to promote the formation of clear products.

## Storage

Wacker-Belsil PDM 20 has a shelf life of at least 12 months when stored at room temperature 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



## 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
Viscosity at 25°C, approx, [mm <sup>2</sup> /s]	20
Refractive index at 25°C, approx.	1,437
Density at 25°C, approx., [g/cm <sup>3</sup> ]	1.0
Flash point, approx., [°C]	170
INCI name	Trimethylsiloxyphenyl Dimethicone (proposed)

**Additional Information**

## Solubility

Ingredient	Wacker-Belsil PDM 20	Ingredient	Wacker-Belsil PDM 20
<b>Mineral Oils / waxes</b>		<b>Emulsifiers/rethoxylated Oils</b>	
C9-13 Isoparaffin	✓	PEG-75 Lanolin Oil	•
Mineral Oil, high-visc.	•	PEG-7 Glyceryl Cocoate	•
Mineral Oil, low-visc.	•	PPG-5-Laureth-5	✓
<b>Ester Oil</b>		<b>Alcohols</b>	
Ethyl Acetate	✓	Octyldodecanol	✓
C12-15 Alkyl Benzoate	✓	Oleyl Alcohol	✓
Isopropyl Myristate	✓	Isopropanol	✓
Decyl Oleate	✓	Alcohol	✓
Oleyl Oleate	✓	Glycerol	•
<b>UV-Filters</b>		Propylene Glycol	
Ethylhexyl Methoxycinnamate	✓	Water	
Ethylhexyl Salicylate	✓	<b>Silicone Fluids</b>	
<b>Triglycerides</b>		Wacker-Belsil® CM 040	
Castor Oil	P	Wacker-Belsil® CM 1000	
Olive Oil	✓	Wacker-Belsil® DM 0.65	
Wheatgerm Oil	✓	Wacker-Belsil® DM 1 plus	
Lanolin Oil	✓	Wacker-Belsil® DM 10-500000	
Caprylic/Capric Triglycerides	✓	Wacker-Belsil® SPG 128 VP	
		Wacker-Belsil® TMS 3069 VP	

✓ = Soluble (&gt; 10%)

P = Partially soluble (1 – 10%)

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

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