

# Wacker-Belsil® SPR 45 VP

Polyphenylsilsesquioxane

## Characteristics

Characteristics: Wacker-Belsil® SPR 45 VP is a solvent-free phenyl silicone resin. This product is produced for use as a film former in cosmetic applications.

## Special Characteristics

Wacker-Belsil® SPR 45 VP shows good film forming properties which enable the product for use in long lasting cosmetics like lipsticks. Because of its phenyl groups Wacker-Belsil® SPR 45 VP provides up to 50 % more gloss than standard silicone resins. This is also proved by a clearly higher refractive index.

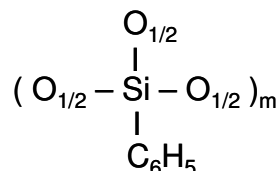
## Application

These special properties predestine Wacker-Belsil® SPR 45 VP as a raw material for color cosmetics, skin care and sun care products.

## Processing

Wacker-Belsil® SPR 45 VP can be dissolved in different solvents at temperatures between 50 – 70 °C and added as solution into a formulation.

## Chemical structure:



## Storage

Wacker-Belsil® SPR 45 VP has a shelf life of at least 12 months if stored in tightly closed original containers at room temperature. The „Best use before end“ date of each lot is shown on the product label.

If the material is kept beyond the recommended shelf life, it is not necessarily unusable, but a quality control should be performed on the properties relevant to the application.

## Additional information

All figures are intended as a guideline and should not be used preparing specifications.

## Safety information

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

## Product data

Properties	Unit	Wacker-Belsil® SPR 45 VP
Appearance		colourless flakes
Softening point	[°C]	~ 60°C
Storage temperature	[°C]	< 30
Refractive index (82 °C, liquid)		1.55
Refractive index (25 °C, film)		1.57
INCI name		Polyphenylsilsesquioxane

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

**Additional information**
**Compatibility**

Ingredient	Wacker-Belsil® SPR 45 VP	Ingredient	Wacker-Belsil® SPR 45 VP
<b>Mineral Oils</b>		<b>Alcohols</b>	
Isododecane	Δ	Isostearyl Alcohol	✓
C9–13 Isoparaffine	Δ	Oleyl Alcohol	✓
Hydrogenated Polydecene	Δ	Isopropanol	Δ
		Ethanol	✓
<b>Ester Oils</b>		<b>Emulsifiers &amp; Ethoxylated Oils</b>	
C12-15 Alkyl Benzoate	✓	PEG-7 Glyceryl Cocoate	Δ
Isopropyl Myristate	✓	Di-PPG-3 Myristyl Ether Adipate	Δ
Dicaprylyl Carbonate	P		
Isopropyl Palmitate	Δ	<b>Silicone fluids</b>	
Pentaerythritol Tetraisostearate	Δ	Cyclopentasiloxane (Wacker-Belsil® CM 040)	Δ
Phenethyl Benzoate	✓	Disiloxane (Wacker-Belsil® DM 0.65)	Δ
Ethyl Lactate	✓	Dimethicone (Wacker-Belsil® DM 1 plus)	Δ
Butyl Lactate	✓	Trimethylsiloxyphenyl Dimethicone (Wacker-Belsil® PDM 20)	Δ
Diisobutyl Adipate	✓		
<b>UV-filters</b>			
Ethylhexyl Methoxycinnamate	P		
Ethylhexyl Salicylate	Δ		
✓ = soluble (> 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 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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