

Wacker-Belsil® SPG 128 VP

Cyclopentasiloxane, Caprylyl Dimethicone Ethoxy Glucoside

Characteristics

Wacker-Belsil® SPG 128 VP is supplied as a 20% active solution in cyclopentasiloxane. The silicone polyglucoside contained in this solution is a nonionic surfactant with an HLB of approximately 6-7. This silicone polymer is synthesized using a renewable, natural, sugar-based component and is therefore in part rapidly biodegradable.

Silicone polyglucosides are surface-active silicone surfactants known for their mildness and gentleness. These materials are not employed as primary surfactants, as they do not produce a significant amount of foam on their own. The silicone terpolymer Wacker-Belsil SPG 128 VP is known to provide good emulsification benefits for triple-phase formulations comprising water, silicone, and an organic phase. It is particularly advantageous in sunscreen formulations, where it may improve product efficacy.

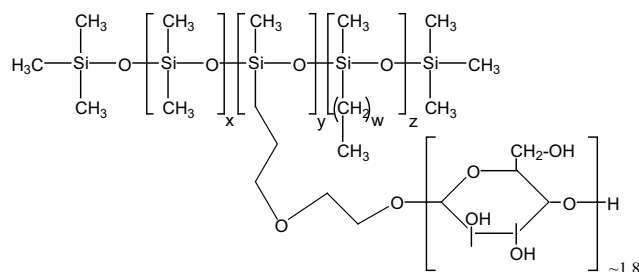
Applications

Wacker-Belsil SPG 128 VP was designed specifically as a water-in-oil or water-in-silicone emulsifier for compositions comprising volatile silicones or non-polar organic fluids as the continuous phase. Water-in-silicone formulations are noted for imparting a soft and velvety feel to the skin and for their excellent spreading properties. They also offer easy rheological modification, and greater product stability as compared to oil-in-water systems.

Wacker-Belsil SPG 128 VP is an excellent emulsifier

for water-in-oil and water-in-silicone systems in skin care, sun care, and deoactive cosmetics. In antiperspirants/deodorants, it imparts a dry, smooth pay-out to sticks, gels, and lotions. This product also serves as a good levelling agent for pigments in liquid and powder color-cosmetics compositions.

Chemical Structure



Storage

Wacker-Belsil SPG 128 VP 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.

Product data

Properties	Characteristics
Appearance	Clear to translucent, yellowish liquid
Viscosity at 25°C, approx., [mm ² /s]	50
Density at 25°C, approx., [g/cm ³]	0.96
Solids content, approx., [%]	20
Refractive index at 25°C, approx.	1.400
Flash point, DIN 51758, [°C]	> 70
Odor	Characteristic
HLB Value, approx.	6 – 7
INCI name	Cyclopentasiloxane, Caprylyl Dimethicone Ethoxy Glucoside

Additional Information

Solubility

Ingredient	Wacker-Belsil SPG 128 VP	Ingredient	Wacker-Belsil SPG 128 VP
Mineral Oils/Waxes		Emulsifiers/Ethoxylated Oils	
Mineral Oil, high visc.	Δ	PPG-5-Laureth-5	Δ
Mineral Oil, low visc.	Δ	PEG-7 Glyceryl Cocoate	Δ
Ozokerite Wax	Δ	PEG-75 Lanolin Oil	Δ
C9-13 Isoparaffin	✓		
		Alcohols & Water	
Ester Oils		Oleyl Alcohol	Δ
Ethyl Acetate	✓	Octyl Dodecanol	Δ
Oleyl Oleate	Δ	Alcohol	✓
Decyl Oleate	Δ	Isopropanol	✓
C12-15 Alkyl Benzoate	Δ	Glycerol	Δ
Isopropyl Myristate	✓	Propylene Glycol	Δ
Isopropyl Palmitate	✓		
		Silicone Fluids	
UV Filters		Wacker-Belsil® CM 040	✓
Ethylhexyl Methoxycinnamate	Δ	Wacker-Belsil® DM 0.65	✓
Ethylhexyl Salicylate	Δ	Wacker-Belsil® DM 1 plus	✓
		Wacker-Belsil® DM 10	✓
Triglycerides		Wacker-Belsil® PDM 20, PDM 200	✓
Castor Oil	Δ		
Olive Oil	Δ		
Wheatgerm Oil	Δ		
Lanolin Oil	Δ		
Caprylic/Capric Triglycerides	Δ		

✓ = Soluble (> 10%)

P = Partially soluble (1 – 10%)

Δ = insoluble

Safety Information

Detailed safety information is contained in each material safety data 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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