

Gilugel® SIL5

Rheological Additive for Cosmetic Formulations

INCI Name: Cyclopentasiloxane (and) Cyclohexasiloxane (and) Aluminum/Magnesium Hydroxide Stearate

General

The quality of an emulsion is primarily determined by the composition of the oil phase. The oils and esters used, particularly for W/O emulsions, should be chosen for their suitability to the application area. For light emulsions it is recommended to use light oils and esters with good spreadability. Emulsions are normally stabilised with waxes, which tend to have an unpleasant, sticky skin feel. Stabilising emulsions with Gilugel® avoids this problem.

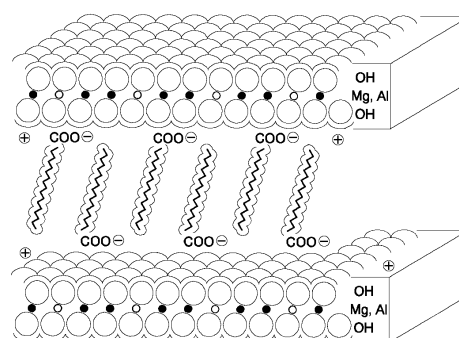
Gilugel® SIL5 acts in the oil phase as an emulsion stabiliser and thickener. Application levels between 5 and 15% are recommended, depending on the viscosity required.

What Gilugel® SIL5 is

Gilugel® SIL5 is a gel based on the inorganic pharmaceutical active, Hydrotalcite, gelled in Cyclomethicone.

Composition

Aluminium-Magnesium-Hydroxide-Stearate:	17 - 23 %
Al	0,9 - 1,2 %
Mg	2,4 - 3,2 %
Water	max. 2 %
Density	0,95 - 1,05 %
Heavy Metals (as Pb)	max. 30 ppm
Cyclomethicone	78 - 80 %
Solubility	insoluble in water



Packaging

25 kg pails with lids

Storage and Shelf life

The material is stable for 3 years when stored at room temperature in the original, unopened containers.



Raw Materials/ Trade name	INCI name	w/w [%]
A. Gilugel® SIL 5 (1)	Cyclopentasiloxane (and) Cyclohexasiloxane (and) Aluminum/Magnesium Hydroxide Stearate	15,00
Imwitor 780 K (2)	Isostearyl diglyceryl Succinate	5,00
DC 345 Fluid (3)	Cyclopentasiloxane (and) Cyclohexasiloxane	5,00
Pigments		3,00
B. Water		67,00
Glycerine	Glycerine	5,00
Preservatives		q.s.
C. Perfume		q.s.

W/O - Emulsion C 15

This emulsion is an excellent base for liquid foundations. The pigment level should be between 3-5%

Gilugel® SIL5 acts as a stabiliser and dispersing agent for the pigments.

Procedure

Emulsify phase B with phase A under homogenisation

Suppliers

- 1)BK Giulini
- 2)Sasol
- 3)Dow Corning

Raw Materials/ Trade name	INCI name	w/w [%]
Gilugel® SIL 5 (1)	Cyclopentasiloxane (and) Cyclohexasiloxane (and) Aluminum/Magnesium Hydroxide Stearate	29,00
Isopropyl Myristate	Isopropyl Myristate	20,00
DC 345 Fluid (3)	Cyclopentasiloxane (and) Cyclohexasiloxane	18,00
Aloxicoll® SD 100 (1)	Aluminum Chloro- hydrate	33,00
Filling instructions:		
Antiperspirant bulk		25,00
Propane		5,25
Butane		29,75
n-Pentane		40,00

High Efficacy Antiperspirant Aerosol A 53

Gilugel® SIL5 acts as a dispersing agent for the antiperspirant active and as a thickener for the oil components in this formulation.

Procedure

Mix **Gilugel®**, IPM and volatile Silicone under rapid agitation. Disperse the Aloxicoll® powder and mix under shear until the solids are uniformly dispersed. Add perfume, fill into cans, degas and pressurise.

Suppliers

- 1)BK Giulini
- 3)Dow Corning

Oil Separation

Gilugel® is filled into pails at ca. 80°C. On cooling, the gel contracts and small amounts of oil are forced out of the gel structure. This does not negatively influence the product quality, but should be taken into account when using the material.

BK Giulini GmbH has attempted to be accurate and informative regarding the products described herein: however, due to the vast potential for use of such products, we cannot take responsibility for results from the use of any product, method, or apparatus mentioned in this brochure. We must advise that no statement or suggestion herein is to be considered a recommendation or inducement for any use, manufacture, or sale that may infringe any patents now or hereafter in existence. It is the user's responsibility to make and be guided by his own tests in determining the suitability of any such product, method, or apparatus for any purpose.