

OPTIGEL-CL

Gelling Agent for Water Phases in Cosmetic Applications

Product Data

INCI Name

Magnesium Aluminum Silicate

Product Description

OPTIGEL-CL is an activated smectite and ultra-white product. OPTIGEL-CL is used as a thixotropic agent in water-based systems with excellent anti-settling and stabilizing properties. OPTIGEL-CL is non-irradiated and may contain variable amounts of micro-organisms. OPTIGEL-CL is certified according to the natural and organic standards of ECOCERT.

Typical Properties

The values indicated in this data sheet are typical and do not constitute specification limits.

Form:	Free flowing powder
Color:	White
Specific Weight:	approx. 2.6 g/cm ³
Primary Particle Size at Complete Dispersion:	1 - 5 µm
Temperature Stability:	up to approx. 400°C
Water Content:	max. 12.0 %
Loose Bulk Density:	400 - 600 g/l
Dry Sieve Residue 45µm:	max. 5.0 %
pH Value (2 % suspension in water):	9 - 11
Brightness (Elrepho R 457):	about 80 %

Recommended Use

Application areas:	Personal Care:	Cream and Lotion Sunscreen Product Shower Gel and Shampoo Face Mask
	Color Cosmetics:	Liquid Make-up Foundation Blush Eye Product

Incorporation and Processing Instructions

To get the optimum efficiency, a complete dispersion of the material is required. Therefore OPTIGEL-CL should be incorporated applying high shear forces e.g. by using a dissolver or a mill. To facilitate the dispersion, warm water can be used. OPTIGEL-CL is then added slowly to the water (emulsion) under slow agitation. OPTIGEL-CL can also be incorporated as powder added to the grind base.

OPTIGEL-CL can also be used as pre-manufactured pre-gel (containing 7 – 12 % OPTIGEL-CL). To avoid post thickening effects, this pre-gel should be allowed to age overnight. Stirring for approx. 15 minutes under high shear is therefore recommended.

OPTIGEL-CL

Data Sheet
Issue 05/2018

Recommended Levels

Depending on application, 1 – 10 % of OPTIGEL-CL (based upon total formulation weight) is used.

These levels are suggested as guideline; optimum levels can be determined by laboratory tests.

Special Note

OPTIGEL-CL is compatible with most emulsions, pigments or extenders. Higher concentration of electrolytes should be avoided since otherwise the gel structure can be damaged. By using OPTIGEL-CL, storage stable systems can be produced. Due to the thixotropic behavior, the application is significantly improved. OPTIGEL-CL is purely inorganic and stable against diluted acids and bases. Gels produced with OPTIGEL-CL also withstand oxidation or microbial degradation. OPTIGEL-CL is compatible with anionic and nonionic surfactants. The irradiated base material is available under the name OPTIGEL-CL XR.

Storage and Transportation

OPTIGEL-CL should be stored dry in unopened, original packaging at temperature between 0°C and 30°C.

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