

OPTIGEL CL

Gellant

Product Data

Special Features and Benefits

This OPTIGEL grade is specially selected and activated smectite products. It is swelling in water and shows a marked thixotropic thickening effect.

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 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 incorporated thixotropy, the application is significantly improved.

OPTIGEL CL prevents settling of heavy pigments or fillers. As thixotropic agent, OPTIGEL CL reduces sagging and allows the application of thick coatings.

Recommended Use

As thixotropic antissettling agent, OPTIGEL CL can also be used in: adhesives, bitumen emulsions, sealants, putties, ceramics, pavement plasters, water reducible systems. OPTIGEL CL is also effective in stabilizing emulsions used e.g. in the cosmetic or pharmaceutical industries.

Typical Properties

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

Form:	free flowing powder
Colour:	white
Brightness (Elrepho R 457):	approx. 80 %
Specific weight:	approx. 2.6 g/cm ³
Loose bulk density:	500-650 g/l
Residue on 45 µm screen:	max. 5 %
Particle size at complete dispersion:	1-5 µm
Water content:	8-12 %
pH-value (2 % suspension):	9-11
Temperature stability:	up to approx. 400 °C

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 can also be used as premanufactured pregel (containing 5-10 % OPTIGEL CL). To avoid post thickening effects, this pregel should be allowed to age over night.

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Recommended Levels

OPTIGEL CL can be used to thicken and stabilize emulsions and emulsion paints. Depending on requirements, between 1 % and 10 % of OPTIGEL CL (referring to total formulation) are incorporated.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Storage and Transportation

Two years if stored dry in unopened, original packaging at temperatures between 0 °C and 30 °C.

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