OPTIGEL-CK

Gelling Agent for Water Phases in Cosmetic Applications

Product Data

INCI Name
Bentonite

NATRUE Approved

Product Description
OPTIGEL-CK is an activated bentonite product. OPTIGEL-CK is used as a thixotropic agent in water-based systems with excellent anti-settling and stabilizing properties. OPTIGEL-CK is non-irradiated and may contain variable amounts of micro-organisms. OPTIGEL-CK is ECOCERT, COSMOS and also NATRUE approved.

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

Form:	Free flowing powder
Color:	Greyish
Specific Weight:	2.5 g/cm³
Primary Particle Size at Complete Dispersion:	1 - 5 µm
Water Content:	max. 13.0 %
Loose Bulk Density:	550 - 750 g/l
Dry Sieve Residue 45 µm:	max. 5.0 %
pH Value (2 % suspension in water):	9 - 11
Brightness (Elrepho R 457):	about 60-65 %

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-CK 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-CK is then added slowly to the water (emulsion) under slow agitation. OPTIGEL-CK can also be incorporated as powder added to the grind base.

OPTIGEL-CK can also be used as pre-manufactured pre-gel (containing 5 – 10 % OPTIGEL-CK). 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.

Recommended Levels
Depending on application, 0.5 – 3 % of OPTIGEL-CK (based upon total formulation weight) is used. These levels are suggested as guideline; optimum levels can be determined by laboratory tests.

Special Note
OPTIGEL-CK 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-CK, storage stable systems can be produced. Due to the thixotropic behaviour, the application is significantly improved. OPTIGEL-CK is purely inorganic and stable against diluted acids and bases. Gels produced with OPTIGEL-CK also withstand oxidation or microbial degradation. OPTIGEL-CK is compatible with anionic and nonionic surfactants. The irradiated base material is available under the name OPTIGEL-CK XR.

Storage and Transportation

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

The shelf life is 24 months (Refers to unopened original packaging at approx. 20 °C storage temperature).

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