

## OPTIGEL-CL XR

White rheology additive based on natural bentonite to generate thixotropic flow behavior in aqueous personal care applications (COSMOS APPROVED, NATRUE Approved).

Gamma irradiation sterilized version of OPTIGEL-CL.



NATRUE Approved

### Product data

#### Composition

Modified/activated phyllosilicate (INCI: Bentonite)

Vegan

#### Typical properties

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

Bulk density:	400–600 kg/m <sup>3</sup>
pH value (2 % in H <sub>2</sub> O):	approx. 10
Moisture content:	max. 12 %
Sieve residue (45 µm):	max. 5 %
Total viable count:	< 100 cfu/g
Whiteness (Elrepho R 457):	approx. 80 %
Color:	white
Delivery form:	free-flowing powder

#### Storage and transportation

OPTIGEL-CL XR is hygroscopic and should be transported and stored dry in the unopened original container at temperatures between 0 °C and 30 °C.

### Applications

#### Personal care

##### Special features and benefits

OPTIGEL-CL XR generates a thixotropic flow behavior in aqueous systems and provides excellent anti-settling properties. This enables the production of storage-stable formulations and facilitates their application. The additive is white, purely inorganic, and stable against diluted acids and bases. Gels produced with OPTIGEL-CL XR are also resistant to oxidation. The additive is compatible with anionic and non-ionic surfactants and most emulsions and pigments.

## Recommended use

Creams and lotions	<input checked="" type="checkbox"/>
Sunscreen products	<input checked="" type="checkbox"/>
Shower gels and shampoos	<input checked="" type="checkbox"/>
Facial masks	<input checked="" type="checkbox"/>
Liquid makeup	<input checked="" type="checkbox"/>
Blush	<input checked="" type="checkbox"/>
Eye makeup	<input checked="" type="checkbox"/>
Antiperspirants/deos	<input checked="" type="checkbox"/>

especially recommended     recommended

## Recommended levels

1–12 % additive (as supplied) based upon the total formulation, depending on the application.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

## Incorporation and processing instructions

OPTIGEL-CL XR is hydrophilic and can be easily wetted by water. Complete dispersion of the material is required for maximum efficiency. Warm water can be used to facilitate the dispersion. The additive is added as a powder to pure water while stirring slowly. The stirring speed is then increased (800–3000 rpm) and the powder is dispersed for 15 minutes. OPTIGEL-CL XR should be completely hydrated (recommended hydration time: 10 minutes) before all other components of the formulation are added to the dispersion. The additive can also be used as a prepared pre-gel (with 7–12 % OPTIGEL-CL XR). To avoid post-thickening effects, this pre-gel should be allowed to age overnight. It is then slowly added to the water phase of the presentation while stirring at low speed.



Your local  
contact

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This issue replaces all previous versions.