

# OPTIGEL-WX

## Gelling Agent for Water Phases in Cosmetic Applications

### Product Data

#### INCI Name

Bentonite (and) Xanthan Gum

#### Product Description

OPTIGEL-WX is an organically modified and activated bentonite product. It is designed for use in cosmetic and personal care applications, to provide thixotropic stabilization and high thickening in water-based systems.

#### Typical Properties

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

Form:	Free flowing powder
Color:	Slight greyish
Specific Density:	2.2 g/cm <sup>3</sup>
Primary Particle Size at Complete Dispersion:	1 - 5 µm
Water Content:	max. 13 %
Loose Bulk Density:	530 - 650 g/l
Dry Sieve Residue 75 µm:	max. 5 %
pH value (2 % suspension in water):	9 - 11

#### Recommended Use

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

#### Incorporation and Processing Instructions

OPTIGEL-WX is hydrophilic and easily wetted by water. It even starts to swell in cold water. However, the use of warm water facilitates and accelerates the dispersion. To get the optimum efficiency, a complete dispersion of the material is required. Therefore OPTIGEL-WX should be incorporated applying high shear forces e.g. by using a dissolver or a mill. OPTIGEL-WX is then added slowly to the water (emulsion) under slow agitation. OPTIGEL-WX can also be incorporated as powder added to the grind base.

OPTIGEL-WX can also be used as pre-manufactured pre-gel (containing 5 % OPTIGEL-WX). 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 - 2.5 % of OPTIGEL-WX (based upon total formulation weight) is used.

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

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### Special Note

OPTIGEL-WX can be used to thicken and stabilize emulsions. OPTIGEL-WX is compatible with most emulsions, pigments or extenders and is particularly effective in acidic, neutral and alkaline systems. By using OPTIGEL-WX, storage stable systems can be produced. Due to the thixotropy and high viscosity, the application is significantly improved. OPTIGEL-WX is compatible with anionic and nonionic surfactants. In order to prevent microbiological degradation of OPTIGEL-WX, preservation is necessary, depending on the application. Masterbatches, which are not processed immediately, should be preserved in any case.

### Storage and Transportation

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

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