OPTIGEL-WX XR

Gellant

Product Data

Special Features and Benefits
OPTIGEL-WX XR, a specially selected and activated smectite product, has a high swelling capacity in water and shows a marked thixotropic thickening effect.

OPTIGEL-WX XR is stable in diluted acids and bases and is particularly effective in acidic, neutral and alkaline systems.

The application of OPTIGEL-WX XR allows the production of systems which are storage stable. Due to the incorporated yield value and pseudoplasticity, the application performance is improved considerably.

OPTIGEL-WX XR prevents the settling of heavy pigments of fillers. As thixotropic agent, OPTIGEL-WX XR inhibits sagging. Thus it allows the application of thick coatings.

Recommended Use

- Emulsion paints
- Release coatings
- Silicate paints
- Paint strippers
- Water reducible paints
- Liquid cleaners
- Inks
- Grinding pastes and abrasives
- Car undercoatings

Composition
Organically modified and activated smectite product

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. 60-65 %
Specific weight:	approx. 2,2 g/cm³
Loose bulk density:	500-650 g/l
Residue on 75 µm screen:	max. 5 %
Particle size at complete dispersion:	1-5 µm
Water content:	max. 13 %
pH-value (2 % suspension):	9-11

Special Note
To reduce the microbial count the additive has been sterilized by gamma irradiation.

Incorporation and Processing Instructions

OPTIGEL-WX XR is hydrophilic and easily wetted by water. OPTIGEL-WX XR even starts to swell in cold water. However, the use of warm water facilitates and accelerates the delamination of dispersion. The recommended employment of high shearing equipment (dissolver, mill) ensures complete dispersion or delamination.

OPTIGEL-WX XR can be incorporated as powder. OPTIGEL-WX XR should be introduced into the water at the initial dispersion phase prior to adding other ingredients. Optimal effectiveness depends on complete hydration. Therefore, stirring under high shearing forces for 10-15 minutes is recommended.

OPTIGEL-WX XR can also be applied as separate masterbatch in a concentration of approx. 5 %. In this case and if the available shear forces are rather low, the pregel should be allowed to age over night to prevent post thickening. The addition of dispersing agents, wetting agents, etc. is not necessary.

In order to avoid biological degradation of OPTIGEL-WX XR, preservation is necessary, depending on the field of application.

Recommended Levels

Depending on the requirements the quantity of OPTIGEL-WX XR used is in the order of 0.3 to 2 %.

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

Storage and Transportation

To be stored and transported at temperatures between 0 °C and 30 °C.

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