Data Sheet Issue 10/2013

# **OPTIGEL WX**

### Gellant

# **Product Data**

### **Special Features and Benefits**

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

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

The application of OPTIGEL WX 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 prevents the settling of heavy pigments of fillers. As thixotropic agent, OPTIGEL WX 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

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# **Incorporation and Processing Instructions**

OPTIGEL WX is hydrophilic and easily wetted by water. OPTIGEL WX 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 can be incorporated as powder. OPTIGEL WX 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 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.

### **Special Note**

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

### **Recommended Levels**

Depending on the requirements the quantity of OPTIGEL WX 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**

24 months if stored in unopened, original packaging at temperatures between 0 °C and 30 °C.