CLAYTONE-HY

Rheology additive based on an organophilic phyllosilicate for solvent-borne systems and powder coatings.

Product data

Composition
Organophilic phyllosilicate

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

Density (20 °C):	1.60 g/cm³
Color:	off-white
Delivery form:	powder

Applications

Powder coatings

Special features and benefits
CLAYTONE-HY is a rheology additive used to increase the melt viscosity in powder coatings. Even at low dosages, the melt viscosity during extrusion and crosslinking reaction is increased. The resulting coating exhibits a low surface structure. At higher dosages, this leads to the development of a fine structure and a reduction in gloss. CLAYTONE-HY can be used to modify the surface structure in fine-textured systems. The increased melt viscosity improves edge coverage, which leads to better corrosion resistance.

Recommended use
The additive is recommended for powder coatings based on epoxy, polyester, polyurethane, and acrylate resins as well as for polyester/epoxy combinations.

Recommended levels
0.5–4.0 % additive (as supplied) based on the total formulation.

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

Incorporation and processing instructions
The additive should be mixed with resin, hardener, pigments, and other raw materials using a high-speed mixer and then extruded.

Coatings industry

Special features and benefits

CLAYTONE-HY is suitable for influencing the flow behavior of coating systems with different polarities thanks to its special organic treatment. It can be used in aliphatic as well as in aromatic systems, and in polar systems. The use of CLAYTONE-HY leads to thixotropic flow behavior, which optimizes storage stability and prevents the settling of pigments and fillers. It also has a positive effect on the anti-fogging properties of the system. CLAYTONE-HY is self-activating and does not require an activator.

Recommended use

Architectural coatings	☐
Floor coatings	☐
General industrial coatings	☐
Wood and furniture coatings	☐
Marine coatings	■
Protective coatings	■

■ especially recommended ☐ recommended

Recommended levels

0.2–2.0 % additive (as supplied) based on the total formulation.

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

Incorporation and processing instructions

CLAYTONE-HY can be added at grinding stage as well as post-added under high shear forces. A high temperature is not required.

Household, industrial and institutional applications

Special features and benefits

CLAYTONE-HY is an organophilic phyllosilicate that is ideally suited for adjusting the flow behavior of solvent-borne cleaners. The additive is obtained from natural bentonites by means of organic modification and is therefore optimally suited for medium-polar and polar solvent systems, such as aromatic systems. The use of CLAYTONE-HY results in a thixotropic flow behavior, which optimizes storage stability, prevents the settling of solids, and allows vertical adhesion of the cleaner to be achieved. CLAYTONE-HY is self-activating and does not require an activator.

Recommended use

Solvent-borne cleaning and washing systems	■

■ especially recommended ☐ recommended

Recommended levels

0.2–2.0 % additive (as supplied) based on the total formulation.

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

Incorporation and processing instructions

CLAYTONE-HY belongs to the self-activating organophilic phyllosilicates and is therefore easy to disperse. Incorporation is achieved by adding the additive to the solvent system under high shear forces. It can be added at any time. Optimally, it is added to the solvent before other components are added.

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