GARAMITE-1210

Powdered rheology additive for solvent-borne and solvent-free systems to increase the storage stability and sag resistance.

Product Data

Composition
Organophilic phyllosilicates

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

Bulk density: approx. 100 kg/m³
Water content: < 6 %
Specific weight: 1.5-1.7 g/cm³

Food Contact Legal Status
For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Storage and Transportation
To be stored and transported at a temperature below 40 °C.

Applications

Coatings Industry

Special Features and Benefits
GARAMITE-1210 is a rheology additive that can be used in all solvent-borne and solvent-free coating systems as a result of its very broad compatibility.

GARAMITE-1210 has the following special features and benefits:
- Pseudoplastic flow
- Improved sag resistance
- Improved anti-settling
- Supports orientation of effect pigments

As a result of its high bulk density, it is easy to use, and displays no shear sensitivity.

Recommended Use
GARAMITE-1210 is recommended for the following applications.

Protective coatings	■
Industrial coatings	■
Architectural coatings	■

■ especially recommended □ recommended

Recommended Levels
0.3-2 % additive (as supplied) based upon the total formulation.

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

Incorporation and Processing Instructions
The additive can be incorporated in different ways. Either disperse GARAMITE-1210 directly in the millbase or add it as a 10-15% paste in solvent to the millbase or letdown. The additive should be incorporated into the solvent at sufficient shear force. When adding during the milling process, we recommend pre-dispersing in the binder and solvent at moderate shear force before adding the pigments and fillers. The effect of GARAMITE-1210 can be further increased by adding a booster or small quantities of a polar solvent or water.

Thermosets

Special Features and Benefits
GARAMITE-1210 is a powdered rheology additive based on a composition of organically modified phyllosilicates. The combination of various morphological structures in the mineral components results in it being particularly easy to disperse and offering high efficiency in various unsaturated polyester and vinylester-based resins.

GARAMITE-1210 offers the following benefits compared with conventional rheology additives:
- Higher coating thicknesses
- Strong shear thinning effect
- Very low shear forces are required for incorporation, which reduces processing time by up to 50 %
- No heat or activators are needed for activation
- Greater bulk densities compared with fumed silica which means lower dusting and less storage space required
- Greater efficiency and/or lower dosage

Recommended Levels
0.5-5% additive (as supplied) based upon resin.

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

Incorporation and Processing Instructions
GARAMITE-1210 can be incorporated directly in the resin. To reach the full effectiveness, the additive should be premixed in styrene for UP/VE resins. In this case, 8-15% GARAMITE-1210 is incorporated into styrene. At this concentration, the blend can still be pumped, flows easily, and can subsequently be added to the resin. It is advisable to use air release additives in these kind of resins to reduce the quantity of air bubbles.

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