Organic clay rheology additive

RT-3740

Features and advantages:

RT-3740 Organic Clay Rheological Additive is an organic ammonium modified organic clay. The product can be used in low to medium polarity systems. After being used in the system, it can increase the viscosity of the system, provide thixotropic properties, prevent or slow down the sedimentation of pigments during storage, improve flowability, and resist sagging.

Product Parameters：

Appearance	Light gray white, light yellow fine powder
Specific gravity (g/cm3)	1.70
Moisture content (%)	≤3.50
Dry powder fineness (200 mesh)	≥98.0
Bulk density (kg/m3)	≤400
Compose	Organic ammonium derivatives of montmorillonite clay

Application fields:

It is an organic clay thickening and rheological additive used in low to medium polarity systems. It can provide good thickening, thixotropy, anti sagging and other properties when dispersed into the system. Mainly used in adhesives, anti rust coatings, automotive topcoats and primers, asphalt coatings, polishing materials, coil coatings, lubricants, thick coating systems, industrial paints, home decoration coatings, plastic surface coatings, primers, renovation coatings, anti-corrosion coatings, road marking paints, inks.

Usage:

It is recommended to add rheological additives during the grinding process, as the product can be fully dispersed under the shear action of the grinding (or stirring) material. Pre gel can also be prepared by traditional methods (5-10% solid with gel),

and then added to the system for dispersion. In order to improve the fluidity of pre gel, some resins or dispersants can be properly added.

1. Dosage

The amount of rheological additives used in paint depends on the desired thickening effect of the system, rheological performance control requirements, pigment specific gravity, and precipitation degree. The dosage range of general industrial paint and home decoration paint is 0.2-0.5% of the paint quantity, while the dosage of primer and thick coating system is 0.5-1%, and its dosage can be 1-2%. The optimal dosage of various coatings can be optimized through experimentation.

2. General usage in paint:

(1) Add some resin/solvent;

(2) Add RT-3740 rheological agent and stir at high speed for 10-20 minutes;

(3) Add 30-50% organic soil and polar activator (such as 95% ethanol, propylene carbonate, etc.) and stir at high speed for 10-20 minutes;

(4) Add wetting agents and bulk materials, grind and disperse (stirring or sanding, etc.) to the desired fineness;

(5) Add the remaining resin solvents and other materials in the formula, grind and mix evenly.

3. General usage method in sealant:

(1) Add solvent and elastomeric polymer, mix and dissolve (double helix mixer);

(2) Add bulk material, mix and wet;

(3) Add RT-3740, then add 30-50% polar activator with organic soil content, and mix until fully dispersed;

(4) Add an appropriate amount of solvent to achieve the desired consistency of the paste

Packaging and Storage:

The outer packaging is made of kraft paper bags, and the inner packaging is made of double-layer polyethylene film bags or paper bags. The weight is usually 25 ± 0.25kg, or packaged according to user requirements. When stored under dry conditions at a temperature of 0-30 ℃, the shelf life of the product is 24 months.