Polyurethane rheological modified thickener

RT-3631

Features and advantages:

RT-3631 is one of the non-ionic association thickener series products modified by polyurethane and hydrophobic groups. It does not contain organic solvents, organotin and APE0 compounds, and is a non-toxic, low-odor, environmentally friendly and efficient rheological modification agent with high shear viscosity thickening and leveling. Compared with RT-3629, RT-3631 not only has better KU thickening effect, but also has about 20 to 25% higher ICI viscosity thickening efficiency

RT-3631 has almost Newtonian flow type rheological characteristics, especially suitable for the rheological, flow level and thickening effect of high requirements at the same time, the product not only has excellent high shear viscosity thickening effect, and its thickening system has excellent fluidity and leveling, widely used in a variety of latex paints, adhesives and other water-based systems. In particular, a variety of high and medium grade internal and external waterborne architectural coatings, waterborne industrial paints, waterborne inks, waterborne adhesives and petrochemical water treatment systems.

In the design of water-based building and industrial latex paint, the viscosity at high shear rate is related to the feel characteristics of the brush coating, the film forming performance, the density and the consistency of the film thickness, which directly affects the life span, water resistance, stain resistance and wash resistance of the film. The excellent thickening efficiency and leveling effect of RT-3631 products at high shear rate are reliable guarantees for the performance of the above-mentioned water-based latex paints: In general, the ICI viscosity at high shear rate shows a simple linear proportional relationship with the amount of RT-3631 used.

1. No organic solvents, no harmful components of organotin and inorganic heavy metals, no APE0 compounds, no increase in the organic volatile content of water-based latex paint,

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non-toxic, low odor, environmentally friendly products.

2. Good brush feel, excellent roller spatter resistance, water resistance, alkali resistance, scrubbing resistance, stain resistance and water resistance.

3. Excellent flow, leveling performance and hiding effect, uniform thickness and film fullness, does not affect the gloss characteristics of the film.

4. Low viscosity liquid products, can be easily added at any stage of paint production, do not need to dilute before use, do not need alkali neutralization, flow level and thickening performance can be achieved in an instant.

5. Non-ionic association thickener, its thickening performance is basically not affected by pH value, can be used in a wide range of pH fan country.

6. Anti-microbial and enzymatic degradation.

Product specifications:

appearance	Pale milky or translucent liquid
Solid Content	20%
solvent	water
density	1.04 g/cm³(25°C)
viscosity	2500-5000 mPa·s(25°C)
Chemical type	Non-ionic association type HEUR

Usage:

RT-3631 can be used in a variety of different coating formulations and has excellent compatibility with many other thickeners. In the usual formulation, RT-3631 is usually used in combination with RT-3625 to achieve the optimal balance of high, medium and low shear viscosity. RT-3631 has better thickening efficiency than RT-3629 and can be used as a flow thickener alone in semi-light and high-gloss coatings based on small emulsions or in adhesive formulations with high emulsions.

The amount of use of this product is determined according to the customer's formula design,

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and the recommended addition amount is 0.8%-3.0%. Customers can use other thickeners according to the different requirements of production, storage, construction and film formation to meet the rheological performance requirements of the formula design. In general, the film forming performance is directly related to the high shear viscosity of the coating, and the size of the high shear shrinkage is in a simple linear proportional relationship with the amount of RT-3631 used. In paint production, RT-3631 is generally added when mixing paint, but the customer can also determine according to the actual production conditions: however, if RT-3631 and RT-3627 are used in the formulation, RT-3631 should be added first to ensure a smooth and rapid thickening effect

Packing:

25 or 200 kg plastic drum and ton drum packaging

Storage:

The product should be stored in a cool, dry and ventilated warehouse under closed conditions, and certain anti-freezing measures should be taken during winter storage and transportation (if frozen, it can continue to be used after proper mixing after defreezing). The recommended storage temperature is 1-49°C

Validity :24 months (under specified storage and transportation conditions). This product does not belong to the chemical dangerous goods, according to the transport regulations of non-hazardous chemicals.

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