Polyamide wax powder

F710

Characteristics and Benefits:

The F710 rheological additive is a specially modified polyamide wax. It is mainly used as a high-performance polyamide wax micro-powder rheological additive for solvent-free epoxy coatings, sealants, and adhesives. It has a lower activation temperature, 100% activity, effectively providing thickening, thixotropic, and anti-sagging properties, and can replace the role of silica in solvent-free epoxy coatings, sealants, and adhesives.

1. 100% active polyamide wax powder, thus having high cost-effectiveness.
2. Excellent storage stability, the product does not change color or absorb water.
3. Excellent anti-sagging and anti-collapse performance, providing better anti-settling effect.
4. Effective activation range of 30-80℃, with a wide activation temperature range.
5. Excellent extrusion performance, with little impact on modulus.

Product parameters：

Appearance	White powder
Composition	Modified polyamide wax
Effective active substance content	100%
Particle size (μm)	Max.15
Capillary melting point (℃)	120-130
Acid value (mgKOH/g)	Max.5

The color of the powder varies slightly depending on the batch of raw materials. It ranges from white to light yellow, but it has no impact on the quality of the product.

Application fields:

MS adhesive for moisture curing suitable for low-temperature production.

Recommended dosage:

Generally speaking, for solvent-free epoxy coatings, the addition amount is 0.5 - 2%; for single-component moisture-curing sealants, the addition amount is 1.0 - 5.0%, which can achieve a relatively ideal effect of anti-sagging and anti-collapse.

Usage instructions:

The temperature range for the application process of F710 is typically between 30-80℃. In the MS sealed adhesive formula that is cured by moisture, F710 is best added together with the MS polymer and plasticizer in the initial stage to a high-speed dispersing equipment with a vacuum device. Then, pigment and filler are added. During the vacuum high-speed dispersion process, the system can be heated through high shear action (generally up to 50℃ or above), which enables F710 to be fully activated. This process usually lasts for about 30 minutes or until the desired dispersion effect and qualified moisture content (typically <800ppm) are achieved. Next, the system is cooled to a temperature where desiccant, adhesion promoter and catalyst can be safely added.

The activation process is a process that transforms F710 from a powder state into a fibrous interaction network structure. It is this network structure that ultimately gives the system the property of shear thinning. This shear thinning characteristic provides the ability to maintain high viscosity under low shear conditions, thereby achieving excellent anti-settling performance; while during construction, that is, under high shear conditions, the viscosity of the system will decrease, resulting in the final outcome of the system having excellent anti-settling performance and being easy to apply. It should be noted that activation at too low a temperature or insufficient activation time will not form an effective network structure, leading to poor anti-sagging and anti-collapse performance.

Packaging:

15kg kraft paper bag. It should be stored in a well-ventilated place, avoiding high temperatures and direct sunlight.

Shelf life: 4 years