H-2593 Ultrafine Silica (Matting Agent)

Product Description

H-2625 ultrafine synthetic silica is an amorphous, porous white powder with no crystalline structure. Through precise control of specific surface area and pore volume, it forms a uniform and stable porous microstructure, making it a high-performance, premium-grade silica matting agent.

The product is suitable for surface matting applications across a wide range of fields, including inks, coatings, plastics, and films. Owing to its ultrafine particle size and porous structure, H-2625 delivers efficient and uniform matting performance, enabling precise creation of matte and semi-matte finishes. At the same time, its fine particle size provides coatings with excellent surface smoothness and high transparency, effectively preventing whitening and gritty texture. It is compatible with various substrate systems and does not adversely affect the original processing behavior or mechanical properties of materials, offering a high-quality surface finishing solution for high-end products.

Key Technical Specifications

Test Item	Specification
Average Particle Size (μm)	≤3.5
Silica Content (dry basis, %)	≥98.0
Loss on Heating (%)	≤6.0
Loss on Ignition (%)	≤6.0
pH Value (5% suspension)	6–8
Oil Absorption (g/100 g)	160–250

Instructions for Use

1. Open the outer packaging carefully and ensure that no fragments of the damaged bag fall into the coating system before use.
2. Optimal performance is typically achieved in coatings with an application weight of ≥5–8 g/m². The addition level should be adjusted according to the desired gloss level or ink absorption requirements. For first-time use, laboratory coating tests are recommended to determine the appropriate dosage before production-scale adjustment.
3. Recommended addition level: 10–18%. Pre-dispersion using high-speed dispersion is required. Under normal conditions, no visible white agglomerates should be observed.
4. For products stored for extended periods, ensure that the material has not been contaminated by rainwater, oil, or other impurities and that no obvious hard lumps or agglomeration are present before use.

Precautions

- After opening, seal the package tightly if not used immediately to prevent moisture absorption.
- Avoid contact with water during use to prevent agglomeration.
- Wear dust masks, gloves, and safety goggles during handling.
- Stacking height should not exceed 10 layers; do not subject packages to heavy compression.
- Store in a dry and well-ventilated environment.
- Long-term exposure to synthetic silica does not cause silicosis.
- Avoid prolonged direct skin contact with the product.
- Do not store in humid environments.
- Protect the product from rain and moisture exposure.