H-2625 Ultrafine Silica (Matting Agent)

Product Description

H-2625 is an ultrafine synthetic silica presented as an amorphous, porous white powder. Its core structure contains no crystalline phase. Through precise control of specific surface area and pore volume, H-2625 forms a uniform and stable porous microstructure, providing high-performance support for advanced surface treatment applications.

As a premium-grade silica matting agent, H-2625 features an ultrafine particle size and a unique porous structure that enables efficient and uniform matting performance. It precisely reduces surface gloss, creating matte and semi-matte finishes that meet the visual and tactile requirements of high-end products.

H-2625 is widely applicable in inks, coatings, plastics, and films, and is particularly suitable for surface matting in high-end furniture coatings, printing inks, food packaging films, industrial coatings, and engineering plastics.

Compared with conventional matting agents, H-2625 offers significant performance advantages. Its uniform ultrafine particle size distribution delivers excellent matting efficiency without compromising surface smoothness. Instead, it enhances coating smoothness and provides a refined, non-gritty tactile feel. The high-purity amorphous structure improves coating transparency and clarity, effectively preventing whitening or haze, making it especially suitable for applications requiring high transparency.

Key Technical Specifications

Test Item	Specification
Average Particle Size (μm)	≤5.5
Silica Content (dry basis, %)	≥99.0
Loss on Heating (%)	≤5.0
Loss on Ignition (%)	≤6.0
pH Value (5% suspension)	6–8
Oil Absorption (g/100 g)	220–280

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 ≥8–10 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.