H-1304D Epoxy-Functional Silicone Microsphere Water Dispersion

(Waterborne Matting Agent)

Product Description

H-1304D is a water-based dispersion of epoxy-functional silicone microspheres that can be incorporated into waterborne inks, coatings, polyurethane, and acrylic systems to provide a silky-smooth feel, excellent scratch resistance, and matte appearance.
This product can be customized with particle sizes ranging from 2.0 µm to 100.0 µm according to customer requirements.
Compared with other epoxy-functional silicone microsphere products, H-1304D offers superior color development, transparency, and matting performance.

Key Features

- Matte surface finish
- Unique silky touch
- Excellent abrasion and scratch resistance
- Easy incorporation into waterborne systems
- High stability, low sedimentation, and non-caking behavior

Typical Properties

Property	Unit	Value
Appearance	—	Milky white liquid
Solid content	wt%	≥52
Specific gravity (25°C)	g/cm³	0.99
Closed cup flash point	°C	>100
Average particle size	µm	4.00

Applications

- Slip and matting additive for waterborne inks, coatings, and other aqueous systems
- Enhances scratch and abrasion resistance
- Provides surface matting and silky touch effects

Application Guidelines

- Dosage: Depending on the desired tactile feel, friction noise reduction, and matting degree, the recommended addition level of H-1304D silicone elastomer microsphere dispersion is 5.0–10.0% of total ink or coating weight.
- Incorporation: Add gradually under stirring at room temperature until evenly dispersed.

Precautions

- This document does not contain product safety information. Please request the Material Safety Data Sheet (MSDS) from our company or authorized distributors if needed.
- The standard product does not contain preservatives. For long-term storage, users should add a suitable biocide.
- Store in a cool, shaded place, strictly avoiding direct sunlight.
- After long storage, slight particle floating or thickening on the surface may occur; stir thoroughly before use.

Packaging

Standard packaging: 25 kg or 200 kg plastic drums
Sample packaging: 100 g plastic bottles

Storage and Shelf Life

Store in unopened original containers at temperatures below 35°C.
Shelf life: 6 months under standard conditions.
If an appropriate preservative or antifungal agent is added, the shelf life can be extended to 12 months.