SIO-593 Waterborne Organosilicon Crosslinker

Overview:

SIO-593 is a specially modified organosilicon polymer that can participate in reactions and provides excellent adhesion to inorganic substrates, particularly glass and some metal surfaces. It significantly enhances the water resistance, boiling water resistance, and adhesion of the coating to the substrate.

Product Features:

1. High reactivity and easily miscible with water.
2. Excellent adhesion to inorganic substrates, especially glass and some metals.
3. Enhances the crosslinking density and water resistance of the coating.
4. Increases tear strength and durability of the coating.
5. Exhibits good stability in systems with a pH of 6.0-9.5; systems outside this pH range should evaluate storage stability.

Typical Characteristics:

Item	Standard Value
Appearance	Transparent liquid
Active content (120℃/2H)	≥99
Specific gravity (25℃)	0.1020
Flash point (℃)	>100
Refractive index (25℃)	1.421
Solvent	None

Application Areas:

1. Waterborne coatings, waterborne inks.
2. Waterborne glass inks, waterborne metal coatings.
3. Recommended addition amount: 0.5-3% by weight of the total formula.
4. Can be added at any stage and air-dried at room temperature; curing at 100℃ gives better results.

Safety, Packaging, and Storage:

1. Store in a cool, dry place at room temperature with the container tightly sealed. Avoid moisture and contamination from acidic or alkaline substances.

2. Shelf life is 12 months. This is a non-hazardous product and can be transported as a regular chemical.
3. Packaging: Available in 25KG/180KG non-recyclable plastic barrels or iron barrels.

This product information is based on our best knowledge from experimental results and is provided for reference only. We recommend customers conduct their own trials based on their specific conditions to ensure the best performance.