

Epoxy Silane Oligomer LD-3168

(Similar to MP200)

Product introduction

LD-3168 is a silicone low molecular weight polymer with epoxy functional groups that can participate in film forming reaction. It is a special silane coupling agent that can be directly added to water-borne or resin paint systems, and can maintain good hydrolysis resistance and storage stability. It can also be used as an adhesion promoter and a cross-linking agent.

Physical and chemical properties

Appearance: transparent clear liquid

Specific gravity: 1.03 g/cm³

Active ingredient: 100%

Viscosity: 30-100 Mpa · s

Acid value: 4.5

Application area

Water-borne and resin systems: surface treatment of epoxy, acrylic, alkyd resin paints, aluminum silver pastes, copper gold powders and inorganic pigments and fillers.

Usage and precautions

Before use, please test the optimal dosage, compatibility with resins and storage stability. Generally, the recommended dosage is 1-3% upon resin content.

Addition method

1. Resin pre-grafting modification method: since inorganic pigments and fillers will participate in the reaction and snatching of the effective components of the auxiliary agent, and the grafting reaction of 3168 with the resin requires a certain induction period, it can be used for high color filler systems such as color paint and matt paint, together with the solvent in the formulation, to fully stir and mix with the resin, and then stand for more than 48 hours, The 3168 resin was fully grafted with the resin and then used as the graft modified resin for backup.
2. It can also be added directly during the paint making process, but it also requires 48 hours to prepare the board to measure the performance.
3. For the surface treatment of powders and metal pigments, it can directly react with powder or inorganic material after diluted with ethanol.

Application characteristics

It has good compatibility with most common emulsion compounds such as water-borne epoxy, water-borne acrylic acid, water-borne polyurethane, etc. It can react with the resin and the substrate or inorganic pigments to form a chemical bond with strong affinity, so as to improve the adhesion to glass, aluminum alloy, galvanized sheet, stainless steel, plastic and other hard to adhere to the substrate. It

can also be used as an anti-swelling and anti-falling surface treatment agent for metal pigments such as zinc powder, aluminum silver paste.

It can be grafted and modified with the carboxyl groups in the resin at room temperature, and can also give the polymer an additional 1K cross-linking reaction during the curing process. The principle of silane modification of resin and the increase of polymer crosslinking density can significantly improve the drying speed, hardness, luster, boiling resistance, salt fog resistance, acid resistance and alkali resistance of paint film.

Storage

Store in a cool, ventilated place, away from heat and fire sources, keep it in a sealed container away from light. It can be stored for 1 year from the date of production.