

Aldehyde Resin SH-A81

Aldehyde Resin SH-A81 is a kind of aldehyde polycondensation resin, which is colorless or yellowish. It is soluble in almost all paint solvents but not in water and compatible with practically all coatings raw materials, it has excellent yellowing-resistance. It is mainly used as a grinding resin in universal pigment and applied in the coating formulation. It is an outstanding vehicle for paint and can effectively improve the adhesion, hardness, gloss, solid content of the paint and fullness of coatings. It is an excellent multifunctional additive to coating/painting.

Specification

Item	Aldehyde Resin SH-A81	Test method
Appearance	colorless, transparent solid,	Naked eye
Color Gardner[1]	<1	ISO 4630-1:2004
Softening point (°C)	95-100	ISO 4625-1:2004
Acid value (mgKOH/g)	<3	ISO 2114:2000
Hydroxyl value(mgKOH/g)	40-70	DIN53240-2:1998
Density(g/cm ³)	1.15±0.05	ISO1183-1:2004(E)B
Kinetic viscosity[2](mm ² /s)	10-25	GB/T 1660-2008
Ford cup 4 viscosity[3](s)	10-25	ASTM D1200

[1] The resin is 50% (mass fraction) solution in butyl acetate and absolute ethanol, they account for 85% and 15% respectively.
[2],[3] 50% resin solution of absolute ethanol, solution temperature remains 25°C , test viscosity.

Solubility

Aldehyde Resin SH-A81 is soluble in most common paint solvents such as aromatic hydrocarbons, alcohols, ketones, and esters, but insoluble in water. Its solubility in nonpolar solvents such as mineral oil, aliphatic hydrocarbon, alicyclic hydrocarbon is limited.

Compatibility

Aldehyde Resin SH-A81 is compatible with many coatings raw materials including:

- alkyd resins
- cellulose nitrate
- cellulose acetate butyrate • petroleum resin
- phenolic resin
- urea-formaldehyde resin
- epoxy resin
- rosin resin
- vinyl chloride copolymers
- acrylic resin
- polyurethane resin
- chlorinated rubber
- phthalate plasticizers
- melamine-formaldehyde resins
- polyamide resin

Application

- The excellent solubility and compatibility of Aldehyde Resin SH-A81 enable it to be used in many types of coating/printing formulation.
- It can be used to improve gloss, hardness, adhesion, and yellowing resistance.
- It shows excellent wetting to the coating and filling, it has low dissolved and melting viscosity, -It is a kind of excellent grinding resin in universal pigment and can improve the solid content when applied in coating.

Storage

Aldehyde Resin SH-A81 must be stored in a dry, cool place. Product shelf life is one year and can be recertified.