

Crosslinker C-100

Polyfunctional Aziridine Crosslinker

Chemical name:

Trimethylolpropane tris(2-methyl-1-aziridine)propionate

Cas Number:64265-57-2

DESCRIPTION

Crosslinker C-100 is a polyfunction aziridine liquid crosslinker.Addition of 1-3% to water based acrylic emulsions or urethane dispersions produces a marked improvement in water , chemical, abrasion and humidity resistance and enhances adhesion to specific substrates.

Crosslinker C-100 is room temperature reactive and therefore can be used under air and forced drying conditions.

SPECIFICATION

Type : polyfunctional aziridine crosslinker

Appearance : Colorless to light yellow transparent liquid

Total solids (W/W %) > 99%

Molecular Formula & Weight : C₂₄H₄₁N₃O₆; 467.67

Viscosity : 50~800mPa • S @25°C

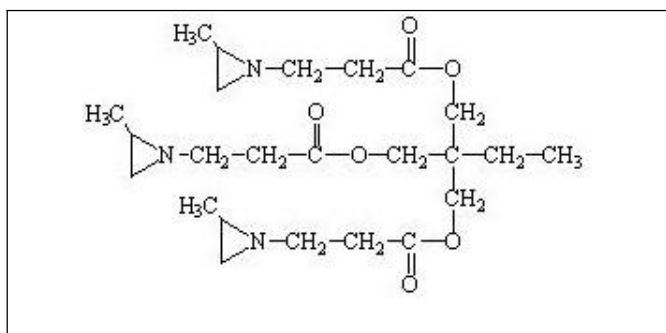
Density : 1.0500~1.0800g/cm³ @25°C

Stability : 12 months @25°C

Flash Point : > 100°C

Freezing Point : < -15°C

STRUCTURE



APPLICATION

In water based parquet lacquers to improve water ,alcohol,detergent,chemical and abrasion resistance.

In water based industrial wood-,plastic-and metal coatings to increase water ,alcohol and block resistance.

In vinyl coatings to reduce plasticizer migration and improve stain resistance.

In water based concrete sealers to improve abrasion resistance.

Generally,to improve adhesion of water based systems to non-polar substrates.

In solvent based polymers to increase resistance properties.

In water based printing inks to improve water and detergent resistance.

FORMULATING GUIDELINES

Crosslinker C-100 is a tri-functional material that crosslinks polymers with reactive carboxyl functionality.

Typical addition levels of Crosslinker C-100 necessary to fully crosslink acrylic emulsions and urethane dispersions are 2% and 3% respectively.

Crosslinker C-100 should be added to lacquers,paints or inks prior to use and due to its excellent water miscibility it can be stirred in by using a 1:1 premix of Crosslinker C-100 and water.

In water borne formulations , Crosslinker C-100 will slowly hydrolyse and blends should therefore be used within 1-2 days after preparation.The hydrolysed products have no adverse effects on the emulsions nor on the dried films, and additional crosslinker may be added to restore reactivity.

Solvent based systems modified by the addition of Crosslinker C-100 must be used within 5 days because they tend to thicken and may be gel within 2 weeks

HANDLING

Care must be taken to avoid any contact with the skin and eyes.When used in spray applications particular care must be taken to avoid oral and/or nasal ingestion by wearing a suitable respirator When handing Crosslinker C-100 it is desirable to prevent inhalation of vapours by proper ventilation or respirator use .

PACKING & STORAGE

Available 2 × 10kg plastic pails;25kg/drum;200kg/drum and 1000kg/Totes .Store in a cool, dry, dark place. If stored under conditions of excessive heat for extended periods the material may discolour, deteriorate and gel.

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