

Curing Agent PZ-28

Description

CURING AGENT PZ-28 is polyfunctional aziridine (PI based), employed as crosslinking agent and adhesion promoter. It is a clear, amber liquid, miscible in water and many common organic solvents.

Application

CURING AGENT PZ-28 can be used in both aqueous and solvent systems as crosslinker. It contains three aziridine groups, which can react with active H⁺, as found in the carboxyl groups of acrylic emulsions and polyurethane dispersions. This reaction protonates and opens the aziridine ring, which then reacts with oxygen of the carboxyl groups forming a cross-link network. It imparts strength and flexibility, improves solvent resistance, alcohol and water resistance, increases hardness, upgrades adhesion to difficult substrates and decreases "blocking" effect.

Technical Specifications

Method of analysis	MU	Standard
54. Viscosity	Sec.	100 - 300 ⁽¹⁾
89. Refractive Index at 20°C	nD	1.469 - 1.473
115. PI content	PPM	< 100

⁽¹⁾ At 25°C

Handling

CURING AGENT PZ-28 must be added to the finished formulated PSA just prior to its use.

The aziridine is added slowly and with a good agitation until complete homogeneity. CURING AGENT PZ-28 can also be diluted in non-protic solvents. It is really important to check the pH of the aqueous system before the addition, because the best results are obtained at **pH>9**. A lower pH may cause the aziridine to react prematurely in the pot.

The level of aziridine to add to the formulated system will depend on the coating system and the desired properties of the coating film. Most applications find use levels between 0.2% and 1.5% on wet weight. Tests on the cross-linking effect must be run after 24 hours from the coating. Pot-life after addition is about 18-36 hours if the pH is above 9.

Packaging

The product is supplied in plastic tanks (10 kg); Iron drums (25 kg); iron drums (200 kg); IBC containers (1000 kg).

Storing

CURING AGENT PZ-28 must be stored at temperature between +5° and +30°C, away from acids and oxidizers. Store in a cool, dry, well ventilated storage area and in closed containers. Protect material from freezing.

Use within 24 months from production date (unopened and in the original packaging).