N-500A HDI-based aliphatic elastic prepolymer hardener

Flexibility and elasticity · Waterproofing, corrosion protection and flooring

An HDI-based aliphatic elastic prepolymer for the Part A hardener in two-component polyaspartic formulations. Pair with a PAE resin. N500 designates a finished heavy-duty anticorrosion coating.



Hardener packaging

200 kg per drum of hardener. Confirm net weight from the label and delivery documents.

The 200 kg figure is for the hardener alone. Validate mix ratio, pot life and recoat conditions for the selected resin, temperature and process.

Technical data and acceptance

Manufacturer performance indicators: NCO and monomeric HDI mass fractions, viscosity at 25°C and platinum–cobalt color. Solids and density are approximate reference values.

Chemical type	HDI-based aliphatic elastic prepolymer
Appearance	Colorless, transparent liquid
NCO content by weight	11.0%–13.0%
Solids content	Approximately 95%
Viscosity at 25°C	1000–1500 mPa·s
Density at 25°C	Approximately 1.09 g/cm³
Color	Platinum-cobalt ≤40
Monomeric HDI	≤0.10%

Data and acceptance

Check batch NCO and resin reactive equivalent before formulating and testing. No equivalent weight or fixed ratio is specified. For guaranteed values and batch acceptance, use the quality certificate, batch COA or supply contract.

Applications and formulation

Evaluate N-500A for flexible waterproofing, corrosion protection or flooring. Compare N-200A when clarity and higher hardness take priority.

GD-1422

Candidate resin for elastic finishes. Measure pot life and drying in the actual formulation.

GD-1520

Candidate resin for a longer working window and large-area leveling. Test the formulation.

Weather-resistant pigment pastes

Validate paste compatibility and film performance in the colored formulation.

Validate before use

Validate compatibility, reactive equivalents, pot life, surface and through-drying, substrate adhesion, mechanical properties, weathering and chemical resistance. Trial the substrate and application method.

This hardener TDS specifies no fixed A:B mass ratio, pot life, coverage, film thickness, coat count, recoat interval, coating service life or warranty period.

Packaging, storage and safety

Packaging

The manufacturer lists 1, 2, 10, 20 and 200 kg metal containers of hardener alone. The standard industrial drum is 200 kg. Confirm net weight against the label and supply documents.

Storage and shelf life

Moisture sensitive. Store sealed in the original container in a cool, dry place at 0–30°C. Shelf life is six months. Confirm the start date against the batch label or delivery documents. Keep away from heat, ignition and incompatible materials.

Dilution and compatibility

Use compatible polyurethane-grade esters, ketones or aromatic hydrocarbons with less than 0.05% water and no reactive groups such as hydroxyl or amino groups. Aliphatic hydrocarbons are unsuitable. Test storage stability. Keep diluted solids at or above 80% to limit haze or sediment on storage.

Safe handling

Exclude moisture. Read the product SDS before handling and follow its ventilation and eye, hand and respiratory protection requirements.

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