

Curing Agent PR-50

A phenol free polycyclic polyamine with high moisture tolerance, designed for use as a curing agent for liquid epoxy resins.

Curing Agent PR-50 has a prolonged pot life and delivers a good curing performance under a variety of conditions including high humidity and temperatures as low as 5°C.

Curing Agent PR-50 ensures excellent resistance to carbonation, amine blush and water spotting and has a loading of 60 – 65 PHR (60 – 65 parts of curing agent per 100 parts of resin).

Technical Specification

Colour	Gardner 6 max
Viscosity @ 20°C	6 – 10 poise
Amine value (KOH/g)	240 – 270 mg
Specific gravity @ 25°C	1.03
Gel time @ 25°C	28 – 36 minutes
Mixing ratio	100:50 w/w 60 – 65 parts per 100 parts of liquid epoxy resin, having an epoxy equivalent weight of 190 average
Loading usage	
Flash point	>100°C
Thin film set time @ 25°C	3 – 5
Typical cure schedule	2 – 7 days at ambient temperature. Gel at ambient temperature plus 2 hours at 60°C At least 24 months in original sealed containers
Storage life	@ ambient temperature
Handling precaution	At least 24 months in original sealed containers @ ambient temperature

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Advantages

- **High moisture tolerance**
- **Good curing performance, under a variety of conditions, including high humidity and temperatures as low as 5°C**
- **Good gloss and smooth finishes in cured film**
- **High chemical resistance.**
- **Suitable for use in the food industries.**
- **Excellent adhesion to a variety of substrates.**
- **Good surface finish, with good resistance to carbamation, amine blush and water spotting.**
- **Loading of 60 – 65 parts of liquid Epoxy Resin having an Epoxy equivalent wt. of 190 average**
- **Reasonably long “Pot Life”, giving adequate time to use the product**

Applications

Curing Agent PR-50 is a general purpose curing agent which can be used in a wide range of applications, the main ones are as follows:

- **Flooring – industrial or commercial floors, showrooms, schools, plant rooms**
- **Food industries and pharmaceuticals etc.**
- **Solvent free and high solids coatings**
- **General-purpose primer**
- **Concrete repair compounds**

Usage Guidelines

Curing agent PR-50 can be used with the following variety of

Epoxy resin loading of 60 – 65 phr:

- **Modified Epoxy Resin PR-5C – Low viscosity (mPa.s) – 500 – 850**
- **Modified Epoxy Resin PR-5C – Std viscosity (mPa.s) – 700 – 1000**
- **Bis A/F Unmodified Epoxy Resin PR-5C Medium viscosity (mPa.s) 6000 – 8000**
- **Unmodified Epoxy Resin Bis A – High viscosity (mPa.s) 12000 – 15000**

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