

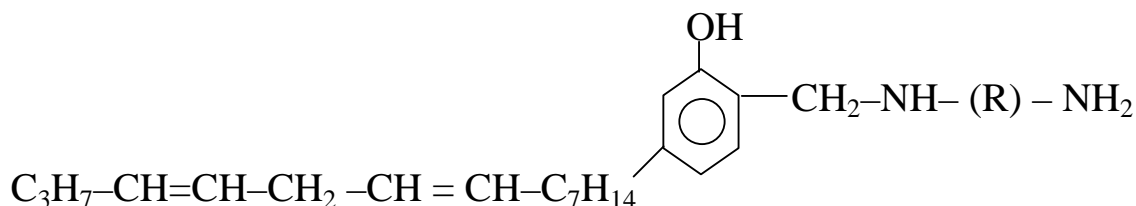


PPA – 7454

PHENALKAMINE EPOXY HARDENER

Phenalkamine **PPA – 7454** is Mannich base, a reaction product of distilled cashew nutshell liquid & polyamine. It is a low viscosity, fast drying curing agent. Formulator can develop epoxy systems which are **VOC** compliant i.e. solvent less or high solids epoxy coating systems. In general, it shows ability to resist moisture, blush free while curing & exhibits rapid cure, even at low temperatures, similar to other phenalkamines. It provide very good adhesion over difficult surfaces like zinc, galvanised, cement & wet surfaces. Hence, it could be used as curing agent in epoxy coating systems applied for heavy duty industrial, marine services, protective and floor coatings etc.

Chemical Structure



Features

- Low viscosity
- Solvent free
- Rapid blush free cure even at low temperatures & high humidity
- Good chemical, solvent & water resistance
- Very good compatibility with
 - i) Epoxy resin based on bisphenol A
 - ii) Epoxy resin based on bisphenol F
 - iii) Epoxy resin based on phenolic novolacs
- Non critical mixing ratio
- Excellent curing under humid, damp & wet conditions
- Good adhesion to mechanically cleaned & difficult surfaces such as Zinc Coated, Galvanised etc.
- Superior corrosion resistance
- Very good flexibility
- Workable pot life at lower temperatures

Applications

- Medium to high solid coatings
- Flooring & construction
- Marine & industrial maintenance coatings
- Tank linings
- Adhesives
- Surface tolerant primers for metallic substrates



Typical Properties

Sr. No	Properties	Unit	Specification
i)	Appearance	Visual	Light brawn viscous liquid
ii)	Colour	Gardner	14 Max
iii)	Amine Value	mg KOH / g	260 – 310
iv)	Viscosity @25° C	cPs	1000 – 2000
v)	Density @25° C	--	0.99 – 1.01
vi)	Flash Point (Closed Cup)	°C / °F	104.4°C / 245.5°F
vii)	AHEW	g / eq.	133
viii)	Recommended PHR (Liquid Epoxy Resin EEW -190)	----	70

Curing Properties

Formulation

Liquid Epoxy Resin (EEW - 190)	100
Paladin PPA – 7454	70

Optimum Curing Schedule 7 days at 25° C in Minutes

Gel Time (100g @ 25° C) Mixing	25 min
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B.K Drying Recorder, set time, (200 microns) 8 mil (Liquid Epoxy Resin EEW - 190)

@ 25° C	3 – 4 hrs
@ 5° C	10 – 11 hrs
@ 0° C	14 – 16 hrs

Storage & Stability

Hardener **PPA – 7454** should be stored in a cool dry place at 18 - 25 ° C in the sealed containers to achieve shelf life of minimum one year. Product can react with moisture & carbon dioxide in the air. This may result in increased viscosity & reduced activity.

Handling Precautions

May be harmful if ingested or absorbed through the skin & can cause sensitization. Will cause severe inflammation in contact with eye & skin. Wash thoroughly after handling. Adequate ventilation is essential during application. Containers should be tightly closed when not in use or during transportation. Do not inhale mist or vapors. It is recommended to use gloves, safety glasses & protective clothing for safe handling.



First AID

In case of

- Inhalation** : Remove to fresh air & give oxygen if breathing is difficult.
- Ingestion** : Give plenty of water. Do not induce vomiting. Contact a physician.
- Contact with eyes** : Flush eyes with plenty of clean water for at least 15 minutes.
- Contact with skin** : Immediately wash with mild soap & water.

Disclaimer

All information contained is based on practical experience. Our technical advice – whether verbal, written by way of trials are given in good faith. Neither warranty nor guarantee is offered or implied & accepted at the seller's risk, since the actual conditions prevailing at the time of using this product are outside the control of the company. Hence it is entirely buyer's & user's responsibility. While the information contained here in is believed to be reliable. **Paladin Paints & Chemicals Pvt. Ltd.** makes no representations as to the results the user or buyer will attain. Product performance & full scale testing are the responsibilities of the buyer & user.

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