

Technical Data Sheet

PPA - 7108

PHENALKAMINE EPOXY HARDENER

Phenalkamine **PPA - 7108** is Mannich base, a reaction product of distilled cashew nutshell liquid & polyamine. It is epoxy adduct of Phenalkamine in solution form.

Chemical Structure

OH
$$CH_2-NH-(R)-NH_2$$

$$C_3H_7-CH=CH-CH_2-CH=CH-C_7H_{14}$$

Features

- Low viscosity
- · Excellent rapid cure even at low temperature
- Good chemical, solvent & water resistance
- Very good compatibility with
 - i) Epoxy resin based on bis- phenol A
 - ii) Epoxy resin based on bis- phenol F
 - iii) Epoxy resin based on phenolic novolacs
- Non-critical mixing ratio
- Excellent curing under humid as well as damp & wet conditions
- Good adhesion to mechanically cleaned surfaces
- Very good adhesion to wet surfaces
- Superior corrosion resistance
- Very good flexibility
- Workable pot life at lower temperatures

Applications

- Coatings for sweating lines / wet surfaces
- Medium to high solid coatings
- Flooring & construction
- Marine & industrial maintenance coatings
- Tank linings
- Adhesives
- Surface tolerant primers for metallic substrates

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Typical Properties

Sr. No.	Property	Unit	Specification
i)	Appearance	Visual	Orange Brown Liquid
ii)	Colour	Gardner	14 Max
iii)	Amine Value	mg KOH / g	320 - 370
vi)	N.V.M. (1 hr @105° C)	%	75 ± 2
v)	Viscosity @25° C	cPs	500 - 3000
vi)	Density @25° C	gm / cm ³	0.95 - 0.97
vii)	Flash Point (Closed Cup)	°C / °F	35 / 95
viii)	AHEW	g / eq.	125
ix)	Recommended PHR (EEW -190)		66

Curing Properties

Formulation

Liquid Epoxy Resin (EEW - 190)	100
Paladin PPA - 7108	66

Optimum Curing Schedule 7 days at 25° C

Gel Time (100g @ 25° C) Mixing 50 - 60 min
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B.K Drying Recorder, set time, (200 microns) 8 mil (Liquid Epoxy Resin EEW - 190)

@ 25° C	3 - 5 hrs
@ 5° C	15 - 18 hrs
@ 0° C	-

Storage & Stability

Hardener **PPA - 7108** 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 vapours. It is recommended to use gloves, safety glasses & protective clothing for safe handling.

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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.

Declaimer

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