

Technical Data Sheet

PPA - 7088

PHENALKAMIDE (PHENALKAMINE MODIFIED WITH POLYAMIDE) EPOXY HARDENER

Phenalkamide **PPA - 7088** is an epoxy adduct of Mannich base reaction product. It shows rapid cure with workable pot life, superior corrosion resistant properties & adhesion to damp surfaces. It has longer pot life to card phenol based Phenalkamines. It offers superior resistance to humidity, acids, alkali, water, solvents & various chemicals.

Chemical Structure

$$\bigcap_{l} CH2 - NH \quad \left\{ (CH_2)_2 - NH \right\}_{n} CH_2 - \bigcap_{l} CH2 - NH \quad \left\{ (CH_2)_2 - NH \right\}_{n} C - R^2$$

R = H, ALKYL, ARYL

R' = MONOMERIC, DIMERIC OR POLYMER OF FATTY ACID

Features

- Low viscosity
- Excellent rapid cure even at low temperature
- · 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 as well as damp conditions
- Good adhesion to mechanically cleaned surfaces
- Superior corrosion resistance
- Very good flexibility
- Workable pot life lower temperatures

Applications

- Medium to high solid primers / mid coats
- 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	Dark Brown Viscous Liquid
ii)	Colour	Gardner	16 Max
iii)	N.V.M. (1 hr @105° C)	%	65 ±2
vi)	Amine Value	mg KOH / g	130 - 180
v)	Viscosity @25° C	cPs	500 - 1500
vi)	Density @25° C	kg / litre	0.96 - 0.98
vii)	Flash Point (Closed Cup)	°C / °F	26.5 / 80
viii)	AHEW	g / eq.	462
ix)	Recommended PHR (Liquid Epoxy Resin -190)		243

Curing Properties

Formulation

Liquid Epoxy Resin (EEW - 190)	30
Paladin PPA - 7088	70

Optimum Curing Schedule 7 days at 25° C

Gel Time (100g @ 25°C) Mixing 120 - 180 min
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B.K Drying Recorder, set time, (200 microns) 8 mil (Liquid Epoxy Resin EEW-190)

@ 25° C	3 - 6 hrs
@ 5° C	18 - 20 hrs
@ 0° C	-

Storage & Stability

Hardener **PPA-7088** 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.

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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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