

Technical Data Sheet

PPA - 7090

PHENALKAMINE EPOXY HARDENER

Phenalkamine systems based on distilled CNSL shows intense yellowing during exterior exposure & as such has colour value very high on gardner scale. **PPA - 7090** is phenalkamine developed to improve the yellowing factor, as well as to assist formulator to develop the lighter shades in epoxy phenalkamine systems.

Chemical Structure

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

C_3H_7 -CH=CH-CH₂ -CH = CH-C₇H₁₄

Features

- Excellent rapid cure even at low temperatures
- 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 novolacs
 - iv) Most of the organic solvents & their combinations
- Non-critical mixing ratios
- Excellent curing under humid & damp conditions
- Good adhesion to mechanically cleaned surfaces
- Superior corrosion resistance
- Very good flexibility
- · Workable pot life

Applications

- Pipeline & tank coatings
- Adhesives
- Surface tolerant primers for metallic substrate
- Marine & industrial coating



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Typical Properties

Sr. No.	Property	Unit	Specification	
i)	Appearance	Visual	Pale Viscous Liquid	
ii)	Colour	Gardner	10 Max	
iii)	N.V.M. (1 hr @105° C)	%	Solvent Free	
iv)	Amine Value	Mg KOH / g	240 - 280	
V)	Viscosity @25° C	cPs	75000 - 150000	
vi)	Density @25° C	kg / ltr	0.98 - 1.00	
vii)	Flash Point	°C / °F	205 / 401	
viii)	AHEW (100 % Solids)	g / eq.	190	
ix)	PHR (Liquid Epoxy Resin – EEW- 190)		100	

Curing Properties

Formulation

Liquid Epoxy Resin (EEW - 190)	100
Paladin PPA - 7090	100

Optimum Curing Schedule 7 days at 25° C

Gel Time (100g @ 25° C) Mixing	30 - 40 min

<u>B.K Drying Recorder, set time, (200 microns) 8 mil</u> (Liquid Epoxy Resin EEW - 190)

@ 25° C	3 - 5 hrs
@ 5° C	20 - 24 hrs
@ 0° C	-

Storage & Stability

Hardener **PPA - 7090** 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 & reduce its 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.



Paladin Paints & Chemicals Pvt. Ltd.

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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

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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