



# SYNPOL PRODUCTS PRIVATE LTD.

Regd Office & Factory: 77, G.V.M.S. AUDYOGIC VASAHA LTD.,  
ODHAV, AHMEDABAD – 382 415, INDIA

PRODUCT CODE : Hardener / 04.18

## Hardener 473

TYPE : Modified aliphatic polyamine based hardener.

DESCRIPTION : Light colour very reactive hardener for solvent free coatings.

### SPECIFICATIONS:

1) Appearance	Clear light yellow liquid.
2) Specific gravity @ 25 <sup>o</sup> C.	1.00 - 1.05
3) Viscosity @ 25 <sup>o</sup> C., poises	25 – 65
4) Amine value by HClO <sub>4</sub> method, mg KOH / gm.	750 - 850
5) Mixing ratio with 100 parts of Synpol 200	18 - 22
6) Pot life @ 25 <sup>o</sup> C with Synpol 200 of 100 g mass, minutes.	10 - 20
7) Cure schedule @ 25 <sup>o</sup> C., days (for optimum strength)	7

### COMPATIBILITY :

Hardener 473 is compatible with all types of modified and unmodified liquid epoxy resins based on Bisphenol A & Bisphenol F, and all types of reactive diluents and plastisizers. It can also be used as co-hardeners with reactive polyamide resins.

### APPLICATIONS :

Hardener 473 is specially formulated for solvent free and high solids fast curing coatings with excellent resistance to organic solvents, particularly alcohols and motor fuels. It finds application with appropriate grades of epoxy resins for tank linings of chemical processing equipments and maintenance coatings.

### SUGGESTIVE FORMULATION :

#### *White anti-corrossive high solids coatings.*

Part I	kgs	
Synpol 200	100	
Titanium dioxide rutile	24	
Blanc fixe	40	
Talc	15	
Aerosil 200	1	
N-Butyl alcohol	5	
Xylene	<u>45</u>	230

Part II		
Hardener 473	<u>20</u>	<u>20</u>
	Total	250

% Solids	80
Viscosity @ 25 <sup>o</sup> C., ford cup no. 4, seconds.	50 - 70
Pot life 25 <sup>o</sup> C., minutes.	40
Pigment binder ratio	40 : 60

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DISCLAIMER: Above Specifications are subject to change without prior notice and company reserves the right to modify the same at any time

**MATERIAL SAFETY DATA :**

Product name	Hardener 473
Flash point ° C. (Abel closed cup)	110
Flammability	Combustible.
Toxicity	Mild toxic. Avoid direct contact with skin.
Handling	Keep away from sources of ignition, provide all electric connections of flame-proof design. Wear safety glasses, rubber gloves and protective clothings.
Emergency treatment and measures	
1 Hygienic precautions	Adequate ventilations.
2 Hygienic treatments (First Aid)	Flush eyes thoroughly with water. Apply ophthalmic cortisone for conjunctivitis and keratities. Wash out contaminated skin with soap and water. Gastric lavage (stomach wash), if swallowed, followed by saline catharsis.
3 Fire precautions (in case of outbreaks)	Use dry chemical or carbon dioxide. Water spray may help to keep containers cool, to dilute leaked resins and to diffuse vapours.
Spills and leakage	Absorb liquid materials in sand and collect solid material and burn under hood in incinerator.
Disposal and waste treatment	Spray into furnace under controlled conditions.

**STORAGE :**

Hardener 473 should be stored in cool place under shade. The properties are so adjusted to have storage stability of minimum 6 months.

**PACKING :**

25 kgs. M.S. drums, 50 kgs. Plastic carboys and 200 kgs. M.S. barrels.

**DISCLAIMER :**

Information in this literature is to the best of our knowledge true and accurate. However, since conditions under which our products may be used are beyond our control, recommendations are made without warranty or guarantee.

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