



# SYNPOL PRODUCTS PRIVATE LTD.

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

PRODUCT CODE: EPOXY / 03.07

## Synpol 450XX

TYPE: Unmodified solid epoxy resin in solution form.

DESCRIPTION: Medium molecular weight solid epoxy resin solution for coatings.

### SPECIFICATIONS:

1) Appearance	Light Yellow Clear
2) Density @ 25 <sup>o</sup> C.	1.07 - 1.09
3) % Solids @ 120 <sup>o</sup> C. for 2 hrs.	73 - 77
4) Solvent	Xylene
5) Viscosity @ 25 <sup>o</sup> C. (50% solution in DAA : Xylene 1 : 1 by ford cup no. 4 in seconds.)	40 -50 seconds
6) Colour (Gardner)	3 max.
7) Epoxide equivalent weight of resin solids	450 – 525
8) % Chlorine content	< 1

**SOLUBILITY:** Synpol 450XX is soluble in equal mixture of n-Butanol and aromatic hydrocarbons, esters, ketones and glycol ethers. It has limited solubility in aromatic hydrocarbons and is insoluble in aliphatic hydrocarbons and water.

**COMPATIBILITY:** Synpol 450XX is compatible with amino resins, thermosetting acrylics and short oil alkyd resins. It is also compatible with hardeners such as aliphatic and aromatic polyamines, polyamine epoxy adducts, polyamides, phenolic resoles and butylated phenolics.

**APPLICATIONS:** Synpol 450XX finds applications in maintenance coatings, marine finishes, tank linings, floor finishes, trade sale paints, concrete coatings and interior pipe coatings. Synpol 450XX due to its narrow and rigid specifications reduces batch to batch variations in final coating properties, gives superior flow, freedom from crawling and cratering and has superior wetting properties. Further it reduces pigment floating, flocculation and silking.

### SUGGESTIVE FORMULATIONS:

*1) White gloss enamel with excellent adhesion on steel, extreme hardness and impact resistance.*

PART I	Base	kgs.	
	Titanium dioxide rutile	22.3	
	Synpol 450XX	28.5	
	Cellosolve	7.7	
	Xylene	15.7	
	Synpol MF 268	0.4	
	Aerosil 200	<u>0.4</u>	75.0
PART II	Hardener		
	Synpol 115	15.8	
	Xylene	5.6	
	Cellosolve	<u>3.6</u>	<u>25.0</u>
	Total		100.0

*2) Epoxy amine adduct coal tar modified maintenance coating for corrosive atmosphere.*

PART I	Base	kgs.	
	Talc	25.0	
	Aerosil 200	1.0	
	Synpol 450XX	16.2	
	Coal tar pitch	36.6	
	Xylene	8.6	
	N-Butyl alcohol	<u>12.6</u>	100.0
PART II	Hardener		
	Hardener 444	12.2	
	Xylene	1.4	
	N-Butyl alcohol	<u>1.4</u>	<u>15.0</u>
	Total		115.0

% Solids	60.0
Epoxy hardener ratio	57.5 : 42.5
Pot life @ 25 <sup>o</sup> C, hrs., aprox.	24.0
Cure @ 25 <sup>o</sup> C, days, for max. properties	7

Mixing ratio by weight	100 : 15
% Solids	80.0

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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	Synpol 450XX
Flash point ° C. (Abel closed cup)	30
Flammability	Moderate fire risk due to presence of xylene.
Toxicity	Mild toxic
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 vapors.
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:

Synpol 450XX 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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