



# SYNPOL PRODUCTS PRIVATE LTD.

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

PRODUCT CODE: EPOXY / 03.10

## Synpol 4000

TYPE : Solid unmodified epoxy resin.

DESCRIPTION : Solid unmodified epoxy resin based on Bisphenol A and Epichlorohydrine primarily meant for manufacture of baking lacquers.

### SPECIFICATIONS:

1) Appearance	Light yellow clear solid lump
2) Density @ 25 <sup>o</sup> C.	1.18 - 1.19
3) Viscosity @ 25 <sup>o</sup> C. of 40% solution in Butyl carbitol, poises	36 - 100
4) Colour (gardner)	3 max.
5) Epoxide equivalent weight of resin solids	2500 - 4000
6) Melting point <sup>o</sup> C. by Ball & Ring method	120 - 140

### SOLUBILITY :

Synpol 4000 is soluble in esters, ketones, glycol ethers. Aromatic hydrocarbons and higher alcohols can be used as latent solvent to limited extent for further dilution. It is insoluble in aliphatic hydrocarbons and water.

### COMPATIBILITY :

Synpol 4000 is compatible with all amino resins, butylated phenolic resins, phenolic resoles and other liquid and solid grades of epoxy resins.

### APPLICATIONS :

Synpol 4000 finds applications in metal decorating finishes, can, drum and tank linings, appliance primer and enamels, metal furniture finishes, primers for practically all types of substrates and powder coatings. Synpol 4000 gives superior flow and wetting, outstanding adhesion and flexibility. It also gives very good chemical, solvent and water resistance along with high gloss development with reduced pigment floating and flocculation. The crosslinking resins for Synpol 4000 are butylated phenolic resins like Synpol L-9 and Synpol L- 97 for optimum chemical and abrasion resistance. Synpol US-8, butylated UF resin is used for optimum flexibility and Synpol MF268, butylated MF resin is used for optimum colour. Synpol 4000 due to its higher molecular weight than Synpol 1800, it offers comparatively higher flexibility.

### SUGGESTIVE FORMULATION :

*Roller coating food can internal lacquer.*

	kgs.
Synpol 4000	26.0
M.E.K.	4.0
D.A.A.	10.0
Ethyl cellosolve	30.0
Synpol L-9	15.4
D.A.A	<u>15.6</u>
Total	100.0

% Solids	36.0
Epoxy phenolic ratio on solid resin	72: 28
Baking schedule @ 200 <sup>o</sup> C, minutes	20 - 30

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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 4000
Flash point ° C. (Abel closed cup)	Above 200
Flammability	Combustible
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 vapours.
Spills and leakage	Collect solid material and burn under hood in incinerator.
Disposal and waste treatment	Spray into furnace under controlled conditions.

### STORAGE:

Synpol 4000 should be stored in cool place under shade. The properties are so adjusted to have storage stability of minimum 6 months.

### PACKING:

25 kgs. polylined HDPE bags.

### 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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