



SYNPOL PRODUCTS PRIVATE LTD.

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

PRODUCT CODE: EPOXY / 03.04

Synpol 230

TYPE: Liquid epoxy resin modified with plastisizer.

DESCRIPTION: Modified liquid epoxy resin based on Bisphenol A and Epichlorohydrine.

SPECIFICATIONS:

| | |
|---|--------------------|
| 1) Appearance | Water Clear Liquid |
| 2) Density @ 25 ^o C. | 1.12 - 1.13 |
| 3) Viscosity @ 25 ^o C., poises | 15 - 25 |
| 4) Colour (Gardner) | 3 max. |
| 5) Epoxide equivalent weight | 200 - 230 |

SOLUBILITY: Synpol 230 is soluble in alcohols, esters, ketones, glycol ethers, aromatic hydrocarbons and is insoluble in aliphatic hydrocarbons and water.

COMPATIBILITY: Synpol 230 is compatible with reactive diluents, plastisizers, and other modified epoxy resins. It can be cured with amine, anhydride, polyamide and other hardeners commonly used with epoxy resins.

APPLICATIONS: As Synpol 230 is modified with plastisizer, it increases resiliency of the cured products and makes it suitable for low temperature applications. Synpol 230 finds applications in castings, encapsulations, floorings, potting, adhesives, laminating, reinforced plastics, filament windings, coatings & electrotechnical requirements. Synpol 230 is used in room temperature curing and heat curing systems for casting, potting, encapsulation of electrical and electronic components such as magnet coil, high voltage coils in the construction of transformers, instrument transformers, slip rings, solenoid coils, capacitors, switchgear components, high voltage insulators, electronic circuits, etc.

SUGGESTIVE FORMULATIONS:

1) White masonry coating.

| Part I | | kgs. | |
|------------------|--|--------------|-------------|
| Synpol 230 | | 17.3 | |
| Titanium dioxide | | 19.2 | |
| Aerosil 200 | | 0.5 | |
| Talc | | 16.5 | |
| Cellosolve | | 3.0 | |
| Xylene | | <u>3.5</u> | 60.0 |
| Part II | | | |
| Synpol 115 | | 11.5 | |
| Talc | | 16.3 | |
| Aerosil 200 | | 0.5 | |
| Cellosolve | | 4.5 | |
| Xylene | | <u>7.2</u> | <u>40.0</u> |
| Total | | 100.0 | |

2) Electrical casting composition

| | kgs. |
|--------------|------------|
| Synpol 230 | 100 |
| Hardener 111 | 10 |
| Silica flour | <u>140</u> |
| Total | 250 |

Procedure: Mix resin and hardener and then add filler under continuous mixing. Consume casting composition immediately.

| | |
|--|---------|
| Pot life @ 25 ^o C., 1 kg. mass, hr. | 1 |
| Cure @ 25 ^o C., hrs. | 6 - 8 |
| Compressive strength, kg/mm ² | 10 - 11 |
| Martens heat distortion temp. ^o C. | 55 - 60 |

| | |
|------------------------------|---------|
| % Solids approx. | 82.0 |
| Pigment binder ratio | 65 : 35 |
| Pigment volume concentration | 38.0 |
| Epoxy polyamide ratio | 60 : 40 |
| Mixing ratio by volume | 50 : 50 |

Continued.....

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 230 |
| Flash point ° C. (Abel closed cup) | 204 |
| 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 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 230 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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