



PRODUCT CODE : MISC. / 10.13 Synpol 225 & Hardener 165 CT

TYPE : Solventless Coal Tar Modified Flexibilized Epoxy Coating, Gap filling, Casting, Adhesive and Sealant systems.

INTRODUCTION :

Solventless Coal tar modified epoxy coating system has all the advantages of solventless systems, giving thick non-porous, highly resistant film with freedom from fire and solvent vapor pollution hazards, but also offers, as well, lower cost and improved adhesion to oily and rusty steel. It shows improved durability in corrosive or high humidity environments.

| SPECIFICATIONS : | Synpol 225 | Hardener 165 CT |
|---------------------------------------|-------------------|------------------------|
| 1) Color | Brownish Tan | Black |
| 2) Viscosity @ 25 °C, poises | 10 - 15 | 75 - 125 |
| 3) Specific gravity @ 25 °C | 1.12 - 1.13 | 1.08 - 1.09 |
| 4) <u>Mixing ratio by weight</u> | <u>One part</u> | <u>One part</u> |
| Mixed viscosity, poises | 15 - 40 | |
| Pot life of 100g. mass @ 25 °C, hours | 0.5 - 2 | |
| Covering capacity in Sq. meter/kg | | |
| (I) Mild steel | 6 - 8 | |
| (II) Concrete | 5 - 6 | |

SURFACE PREPARATION AND METHOD OF APPLICATION :

The performance of any coating largely depends on how the surface is prepared and the properties of coating materials. After having good coating material at users' disposal, it is for him to get maximum advantage by preparing surface as per instructions given by the manufacturer. Sandblasting is the best method to obtain virgin metal or fresh concrete surface desired for application. Other methods include wire brushing, scraping, degreasing with solvents, acid etching, phosphatising, etc., can also be employed best suited to the user.

The Base and Hardener should be mixed as per mixing ratios and quantity so mixed should be used up within the pot life prescribed so as to avoid wastage. Two coats at the interval of 24 hours are recommended to get best results. The coating requires at least 4 – 6 days approximately to get completely cured at temperature of 25 °C, and in winter, when temperature is 15 °C or less, curing should be allowed for minimum one week or more before coated surface is subjected to normal use.

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PROPERTIES AND RESISTANCE OFFERED :

The coating has high degree of flexibility, impact resistance and can take good amount of expansion and contraction up to 10%. It gives excellent resistance to sea water, salt solutions, alkaline and acidic fumes. Further, it offers fairly good resistance to dilute mineral acids and alkalies, aldehydes and glycols, and limited resistance to aliphatic hydrocarbons. However, it is not recommended for aromatic hydrocarbons, ketones and ester solvents. The above recommendations are given as a guideline, but actual requirements should be thoroughly evaluated for the applications intended, as the conditions prevailing at the site of application are beyond the control of the manufacturer of this coating material.

APPLICATIONS :

The following applications are recommended for the solventless Coal tar modified epoxy system.

To get protection from atmospheric corrosive effects to mild steel and concrete structures of bridges, industrial structures, plants and machineries, ships, swimming pools, etc. Useful for effluent treatment tanks, of petrochemicals, pharmaceuticals, dyes and their intermediates, pesticides, and heavy inorganic industries. For coating of storage-silos for fertilizers and other chemicals, pipelines which carry corrosive chemicals and effluents. It is also recommended for waterproofing and corrosion resistant applications of domestic and industrial buildings. It further finds many useful applications in industrial floorings, concrete adhesives, electrical insulations and glass reinforced linings, crack injection and concrete repair compounds.

DISCLAIMER : Above data and recommendations are based on actual tests and experiments, and are issued only for general guidance. Our technical cooperation will always be available in tackling specific problems.

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