



PRODUCT CODE: EPOXY / 03.29

## Epoxy Phenol CNSL

TYPE: Reactive epoxy diluent.

DESCRIPTION: Reactive epoxy diluent based on CNSL and Epichlorohydrine.

### SPECIFICATIONS:

|   |                             |
|---|-----------------------------|
| 1) Appearance   | Reddish brown clear liquid. |
| 2) Specific gravity @ 25 <sup>o</sup> C.                                  | 0.96 - 0.98                 |
| 3) Viscosity @ 25 <sup>o</sup> C by Brookfield spindle # 4, 100 rpm, cps. | 55 - 80                     |
| 4) Colour value (Gardner)   | 13 max.                     |
| 5) Epoxide equivalent weight  | 450 - 560                   |

SOLUBILITY: Epoxy Phenol CNSL is soluble in alcohols, ketones and aromatic hydrocarbons and is insoluble in water.

COMPATIBILITY: Epoxy Phenol CNSL is compatible with all grades of epoxy resins.

FEATURES: Epoxy Phenol CNSL when used along with Synpol 200 gives following properties,

- 1. Viscosity Reduction:** A 50 % reduction in viscosity of a DGEBA resin can be obtained by just a 10 % addition of Epoxy Phenol CNSL.
- 2. Increased Flexibility:** Epoxy Phenol CNSL improves impact and thermal shock resistance. The hardness of the cured product is not reduced significantly up to 15 % addition of Epoxy Phenol CNSL.
- 3. Lower Total Formulation Cost; Higher Filler Loading:** The low viscosity allows a higher filler loading in casting and potting applications, which in turn results in cost reduction. Secondary benefits of the higher filler loading are higher compressive strength, lower co-efficient of expansion, lower exotherm and lower shrinkage.
- 4. Improved Dimensional Stability:** Incorporation of Epoxy Phenol CNSL in an epoxy resin system reduces the internal stress and improves flexural modulus which results in a great improvement in the dimensional stability of a cured product.
- 5. Compatibility:** Epoxy Phenol CNSL is compatible with any of the usual epoxy resin and hardener system and with a wide variety of organic solvents. The hydrocarbon compatibility permits formulating with low cost solvents.
- 6. Increased Pot Life :** Epoxy Phenol CNSL extends the pot life of an epoxy / curing agent mixture without increasing the total cure time. This results in a lower wastage, lower exotherm and bubble free castings.
- 7. Excellent Electrical Properties Especially At Elevated Temperatures:** The electrical properties of the cured resin are maintained on addition of up to 15 phr of Epoxy Phenol CNSL.

In addition to the above properties, it gives improved shear and impact strength, improved filler wetting & adhesion, low volatility and improved resistance to aqueous acids.

### APPLICATIONS:

Floor and Surfacing Compounds  
Terrazzo Floors  
Surface Coatings - both solvent free and solvent-containing.  
Tooling Resins  
Potting and Encapsulation of electrical and electronic components.  
Curing Agent Adducts  
In Laminating with glassfibres.  
Other Uses - Adhesives, Patching Compounds.

Continued.....

## MATERIAL SAFETY DATA:

|  |  |
|--|--|
| Product name                                 | Epoxy Phenol CNSL  |
| 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<br>(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:

Epoxy Phenol CNSL 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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