

# CONSTRUCTION CHEMICALS DIVISION

# **CONCOAT EPS**

# **Technical Data Sheet**

# Solvent Free Epoxy Tar **Protective Coating**

# Composition and Application Field

CONCOAT EPT500 is a high performance, two component, solvent free epoxy coal tar pitch extended reacting with curing agent to form a hard coat with excellent adhesion to certain metal, concrete, and granolithic screeds surfaces. It cures to form corrosion resistance, a semi-gloss finish which is easily cleaned.

#### Uses

CONCOAT EPT500 is a protective coating suitable for foundations, concrete constructions, oil reservoirs, gasoline and silos. It is recommended for underground structures, manholes and sewage treatment water plants.

CONCOAT EPT500 provides a hard wearing, easily cleaned and attractive protective coatings in areas where high resistance to chemical attack is required.

CONCOAT EPT500 is used to protect steel and fiber cement pipes.

## **Advantages**

- Hard wearing durable. Low maintenance costs.
- High abrasion resistance.
- Provides hygienic. Excellent adhesion. Good chemical resistance.
- Protect against corrosion. Applicable to metal and concrete.

# **Surface Preparation**

All surfaces should be clean, dry and free from dust and other contaminants. A dry sponge should be used to remove water on wet surfaces. Treat oil or grease contamination with degreaser followed by water or steam cleanina.

The substrate must be free from oils and greases. Concrete floors should be cured for at least 28 days and have a moisture content less than 5%. Excessive laitance should be removed by mechanical methods. Dust and other debris should be removed by vacuum cleaning.

EPOMORTAR FC two component fast curing epoxy mortar (Refer to TDS). Steel surface should be grit blasted in accordance with BS 4232 or SSPC-SP 5 then clean by THINNERCOAT 10 (organic solvent) and kept to dry. Cleaned steel surface should be coated as soon as possible before the formation of rust takes place.

# Mixing

The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes. Use a heavy duty slow speed power drill with jiffy mixing blade. Mix the two components in the quantities supplied ensuring that the hardener container is scraped clean. Do not add solvent thinners at any time.

#### Application Method

CONCOAT EPT500 is recommended to applied two coats. CONCOAT EPT500 can be applied to prepared surfaces using airless spray, brush or roller.

Ensure that the area is completely coated.

The second coat can be applied after the first coat has initially dried (typically 12 to 18 hours at 35°C).

# Coverage

Coverage depends on the absorption of the substrate. The rate is be 5 m<sup>2</sup>/liter/coat.

and equipment can be cleaned immediately by using THINERCOAT 10 organic solvent.

# Package

18 liter pack (including base, and hardener).

# **Technical Properties**

| <u> </u>   |  |  |
|--|--|--|
| Mixed Density  | 1.42 + 0.05  |  |
| Volume Solids<br>ASTM D 2823-91                                  | 100%   |  |
| Application Temperature  | 12°C to 45°C   |  |
| Tack Free Time   | 3-4 hours at 35°C  |  |
| Full Curing  | 7 days at 35°C   |  |
| Pot Life   | 1 hours at 35°C  |  |
| Shore A Hardness<br>ASTM D 2240 - 91                             | 80   |  |
| Pull-Off ASTM D 4541-85<br>(On concrete)<br>(On steel)           | 2.5 N/mm <sup>2</sup> (CF)<br>2.5 N/mm <sup>2</sup> (CF)             |  |
| Abrasion Resistance<br>(ASTM D 1044-85, CS-17 Wheel 500 gm load) | 100 cycles 5 - 10 mg<br>500 cycles 35 - 45 mg<br>1000 cycles < 90 mg |  |
| Flash Point  | 28°C   |  |

## Chemical resistance to the following as per lab test:

| Acids:  | Alkalis:                           | Aqueous<br>Salts:   | Organic<br>Solvents:                                      |
|---|------------------------------------|---|---|
| Acetic acid 12% Citric acid 1% Hydrochloric acid 10% Nitric acid 10% Phosphoric of 10% Sulphoric acid 10% | Sodium<br>hydroxide<br>20%<br>acid | Sea water<br>Sewage<br>water<br>Sodium<br>chloride<br>Sodium<br>carbonate | Gasoline<br>Kerosene<br>White spirit<br>Toluene<br>Diesel |

# Storage and Shelf Life

Product should be stored at 25oC in dry conditions. 18 months in tightly closed container.

#### Flammability

CONCOAT EPS and THINNERCOAT 10 are flammable materials. Do not expose to naked flames during application.

### **Health and Safety**

Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Use a barrier cream. Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapour or spray. MSDS is available on handling of the safe request for