

# CONSTRUCTION CHEMICALS DIVISION

## **CONCOAT EP250**

### **Technical Data Sheet**

### **Solvent Free Epoxy Resin** Floor Coating

#### Composition and Application Field

CONCOAT EP250 is a high performance, two component, solvent free epoxy resin floor coating. The cured film forms a hard coating with excellent adhesion to concrete, granolithic screeds, and certain metal surfaces. CONCOAT EP250 cures to a glossy, impervious finish which can be easily cleaned. CONCOAT EP250 is available in a wide range of colors and in clear grade.

CONCOAT EP250 complies with British standards BS 476, Part 7: 1971 and BS 5493 - 1971.

#### Uses

CONCOAT EP250 is heavy duty traffic floor coating suitable for use in car parking areas, production assembly areas, workshops, dairies, soft drinks production and bottling plants, kitchens, showrooms and wet working areas.

CONCOAT EP250 provides a hard wearing, easily cleaned and attractive floor coatings in areas where high resistance to chemical attack is required.

**CONCOAT EP250** is used as a top coat for concrete floors and as a finish coat for epoxy floor screeds to provide a more durable and easily cleaned surface where high impact is desirable.

#### **Advantages**

- High impact resistance. Hard wearing durable. Low maintenance costs.
- High abrasion resistance.
- Provides hygienic impervious finish High chemical resistance.
- Applicable to apply on floor and walls. Primerless.

#### Surface Preparation

All surfaces should be clean, dry and free from dust and other contaminants. Wet substrates should be used sponge dried to remove all surface water, then dried. Treat oil or grease contamination should be removed by degreaser followed by water or steam cleaning.

New concrete floors should be cured for at least 28 days and have a moisture content of less than 5%. Excessive laitance should be removed by mechanical method. Dust and other debris should be removed by vacuum cleanina.

Old concrete floors damaged areas or surface irregularities should be repaired by using EPOMORTAR FC two component fast curing epoxy mortar (Refer to TDS).

Steel surface should be grit blasted then clean by solvent and kept to

Epoxy screeds high spots or trowel marks should be rubbed down and remove dust and debris by vacuum cleaning then repair it by using EPOSCREED 10 three components epoxy screed (Refer to TDS).

#### 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 of heavy duty slow speed power drill with a jiffy mixing blade. Mix the two components in the quantities supplied taking care to ensure hardener container is scraped clean. Do not add solvent thinners at any time.

#### Application Method

CONCOAT EP250 is recommended to apply in two coats. CONCOAT **EP250** can be applied to prepared surface using airless spray, brush

Ensure that the area is completely coated.

If anti-slip finishing is required, broad cast Silica Sand (0.25 – 1.00 mm, at 1 kg/m²) while first coat is wet. Applicator can use spiked shoes and confirm that all area completely covered. The second coat can be applied after 12 to 18 hours at 35°C.

#### Coverage

4.5m<sup>2</sup>/L at 250microns (WFT) in two coats

#### Cleanina

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

#### **Package**

16 liter pack (including colored base and hardener).

#### **Technical Properties**

Mixed Density	1.90 + 0.05
Volume Solids ASTM D 2823-91	99% ± 1
Application Temperature	10°C to 35°C
Tack Free Time	2 hours at 35°C
Initial Hardness	20 hours at 35°C
Pot Life	35 minutes at 35°C
Full Cure	7 days at 35°C
Shore A Hardness ASTM D 2240 - 91	85
Pull-Off (On course) ASTM D 4541-85	2.5 N/mm² (Concrete Failure)
Flexural Strength BS 6319	36 N/mm <sup>2</sup>
Tensile Strength ASTM D412	21 N/mm <sup>2</sup>
Abrasion Resistance (ASTM D 1044-85, CS-17 Wheel 500 gm load)	100 cycles 0.5 -1.0 mg 500 cycles 3.5 - 4.5 mg 1000 cycles < 9.0 mg
Water Absorption ASTM D 471	< 0.05%
Chemical Resistance: The following chemicals are spilled on applied samples for 7 days and found satisfy.	Gasoline Resistant Petrol Resistant Diesel Resistant Engine Oil Resistant Kerosene Resistant NaOH 20% Resistant H2SO4 10% Resistant Acetic 5% Resistant Brake fluid Resistant

#### Storage and Shelf Life

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

Flammability CONCOAT EP250 and THINNERCOAT 10 are flammable materials so do not expose to naked flames during application.

#### **Health and Safety**

The application of materials should be in good ventilation and avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of contact with eyes, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately. The product complies with environment and occupational health & safety standards ISO 14001 and OSHA 18001.