



EPOCOAT 400

Solvent Free Nontoxic Epoxy Waterproofing Coating

Technical Data Sheet

Composition and Application Field

EPOCOAT 400 is a two-component, liquid applied epoxy resin based seamless waterproof coating. **EPOCOAT 400** combines the features of epoxy and reactive amine curing agent to produce a tough seamless waterproof coat with excellent abrasion and chemical resistance. **EPOCOAT 400** is applied over concrete and steel. Compliance: **EPOCOAT400** complies with BS 6920 Part 1-2000

Uses

EPOCOAT 400 is used for potable water tanks, canals, culverts, sewage water, swimming pools, silos and other above and below ground structures.

EPOCOAT 400 is also used as a protective coating for floors and walls in hospital operation rooms, dental and veterinary clinics.

Advantages

- Excellent abrasion resistance. Excellent chemical resistance.
- Easy to apply by roller, by brush or airless spray.
- No primer is required. Liquid applied. Non-toxic.
- Provides seamless coatings. High bond strength to a variety of substrates.
- Resists positive and negative pressure. Tolerates a wide range of temperatures.
- Wide range colors.

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 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 methods. Dust and other debris should be removed by vacuum cleaning.

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 cleaned by solvents and kept to dry.

Epoxy Screeds high spots or trowel marks should be rubbed down. Dust and debris

should be removed by vacuum cleaning then repaired it by using **EPOSCREED 10** three component 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 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

EPOCOAT 400 is recommended to apply in two coats by using airless spray, brush or roller. Ensure that the area is completely coated.

Fiber glass mesh at 40 gm/m² can be placed in between If build up and high tensile strength are required.

Limitation:

Don't build up the material in one coat; 200 micron is the maximum thickness of each coat and 24 hours minimum curing time is needed before applying the next coat.

Coverage

2.0 – 3.0 m²/ liter at 400 microns (WFT) in two coats.

Cleaning

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

Package

5 liter pack (including colored base, and hardener).

Technical Properties

Specific Density	1.45 ± 0.05
Volume Solids (ASTM D 2823-91)	100%
Pot Life @ 20°C	60 minutes
@ 35°C	40 minutes
Tack Free Time @ 20°C	6 hours
@ 35°C	3 hours
Full Cure @ 20°C	3 days
@ 35°C	2 days
Time Between Coats @ 20°C	15 hours
@ 35°C	12 hours
Bond strength (ASTM D 4541)	
Steel	3.5 MPa
Concrete	1.5 MPa
Tensile Strength (ASTM D 412)	8.0 MPa
Shore D Hardness (ASTM D 2240)	70
Abrasion Resistance (ASTM D 4060-95)	0.09 mg/cycles
Resistance to Hydrostatic Pressure (DIN 1048)	
Positive	> 13 bar
Negative	> 10 bar
Service Temperature	-2°C to 80°C

Chemical Resistance:

The following chemicals spilled on applied samples for 7days and found satisfy. Sea water, Sweet Water, Butanol, Ethyl Acetate, Toluene, Xylene, Citric Acid 5%, Acetic Acid 5%, Tartaric Acid 10%, Waste Food Stuff, Waste Food Stuff, Starch Solution 5%. Ammonia 0.5.

Storage and Shelf Life

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

Flammability

EPOCOAT 400 is a nonflammable material. **THINERCOAT 10** is a flammable material. Do not expose to naked flames during application.

Health and Safety

The material should be applied in a good ventilated area. Avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of eye contact, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately. The product complies with environmental and occupational health and safety standards ISO 14001 and OHSAS 18001.