



EPOFLEX 400

Nontoxic Epoxy Polysulphide Waterproofing Coating

Technical Data Sheet

Composition and Application Field

Epoflex 400 is a two-component, liquid applied epoxy polysulfide-based seamless elastomeric water proofing coating.

Epoflex 400 combines the features of epoxy and polysulfide to produce a tough and flexible waterproofing membrane with excellent abrasion and chemical resistance.

Epoflex 400 is applied over concrete, masonry, asphalt and steel.

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

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

Epoflex 400 complies with BS 6920 Part 1-2000 and ASTM C957-1998.

Advantages

- Excellent abrasion resistance
- Excellent chemical resistance
- Easy to apply with roller, brush or airless spray
- No primer is required
- Liquid applied
- Non-toxic
- Provides a seamless coating
- Flexible with crack bridging ability up to 2 mm
- U.V. and weather resistant
- High bond strength to a variety of substrates
- Resists positive and negative pressure
- Tolerates a wide range of temperatures
- Wide range of colors

Surface Preparation

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

New Concrete Floors: Should be at least 28 days and have moisture of less than 5%. Excessive laitance should be removed by mechanical method. Dust should be removed by vacuum cleaning.

Old Concrete Floors: Damaged areas or surface irregularities should be repaired by using Epomortar FC (Two components fast curing epoxy mortar, refer to TDS).

Steel Surface: Should be grit blasted then clean by solvent & kept to dry.

Mixing

The mix ratio of Part A: Part B 4.31 KG : 2.7 KG by weight. The entire contents of the hardener (Part B container) should be poured into the base (Part A container) and mix thoroughly for at least 3 minutes. Use of heavy duty slow speed power drill with a jiffy mixing blade. Do not add solvent thinners at any time.

Application Method

Epoflex 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; 250 micron is the maximum thickness of each coat and 24 hours minimum curing time 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 Thinnercoat 10 organic solvent.

Chemical Resistance

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

Packing

7 Ltr. pack (including part A and part B)
5 Ltr. pack (including part A and part B)

Technicals Properties

Solids Volume	100%	
Specific Gravity	1.35 ± 0.05	
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)	6.0 MPa
Tear Resistance	(ASTM D 1004)	13 N/mm
Elongation at Break	(ASTM D 412)	40%
Shore D Hardness	(ASTM D 2240)	50
Abrasion Resistance	100 cycles	15 mg
(ASTM D 4060-95)	500 cycles	75 mg
CS-17 Wheel 500 gm	1000 cycles	90 mg
Resistance to Hydrostatic Pressure		
(DIN 1048)	Positive	> 13 bar
	Negative	> 10 bar
Crack Bridging	(ASTM C 386)	Minimum 2 mm
Water Vapor Transmission		0.8-1.3 g/m ² /day
(ASTM E 96-80)		
Low Temperature Flexibility		
@ 0.25 mm coating	(ASTM D3111)	Pass at 26°C
Service Temperature	-2°C up to 80°C	
Flammability	Non-flammable	

Storage and Shelf Life

Product should be stored at 25°C in dry conditions and keeping away from source of flame. Lasts 12 months in tightly closed container.

Safety Precaution

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.