

EPOFLEX 500

Epoxy Polysulphide Waterproofing Coating

Composition and Application Field

EPOFLEX 500 is a two-component, liquid applied epoxy polysulfide-based seamless elastomeric water proofing coating. EPOFLEX 500 combines the features of epoxy and polysulfide to produce a tough and flexible waterproofing membrane with excellent abrasion and chemical resistance. **EPOFLEX 500** is applied over concrete, masonry, asphalt, sewage water pipes and steel marine constructions.

Advantages

- Excellent abrasion resistance.
- Excellent chemical resistance.
- Easy to apply with roller, brush or airless spray.
- No primer is required.
- Liquid applied.
- Provides a seamless coating.
- Flexible with crack bridging ability up to 2 mm.
- 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 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 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 cleaning. **Old concrete floors** damaged areas or surface irregularities should be repaired by using **EPMORTAR FC** two component fast curing epoxy mortar (Refer to TDS). **Steel surface** should be grit blasted then clean by solvent and kept to dry. **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 component epoxy screed (Refer to TDS.)

Mixing

The mix ratio of Part A: Part B 1: 1 by volume. 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 500 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 before applying the next coat.

Coverage

2.0 m²/ liter at 500 microns (WFT) in two coats.

Cleaning

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

Package

5 litr pack (including colored base and hardener)

Technical Properties

Property	Value	
Solids Volume	100 %	
Specific Gravity	1.35 ± 0.05	
Pot Life	@ 20 °C @ 35 °C	3.0 hours 1.5 hours
Tack Free Time	@ 20 °C @ 35 °C	24 hours 16 hours
Full Cure	@ 20 °C @ 35 °C	7 days 4 days
Time Between Coats @ 20 °C	@ 20 °C @ 35 °C	24 hours 16 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)	60%	
Shore D hardness (ASTM D 2240)	50	
Abrasion Resistance (ASTM D 4060-95, CS-17 Wheel 500 gm)	100 cycles :15 mg 500 cycles:75 mg 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 Rate (ASTM E 96-80)	0.8-1.3 g/m ² /day	
Low Temperature Flexibility @ 0. 5 mm coating (ASTM D3111)	Pass at 26°C	
Service Temperature	-2 °C to 80 °C	
Flammability	Non-flammable	

Chemical Resistance:

The following chemicals spilled on applied samples for 7 days and found satisfy: Sea water, Sewage Water, Sweet water, Butanol, Ethyl Acetate, Toluene, Xylene, Citricacid 20%, Acetic acid 5%, Tartaric acid 10%, Waste Food Stuff, Waste Food Stuff, Starch Solution 5%, Ammonia 0.88.

Storage and Shelf Life

Product should be stored at 25°C in dry conditions. 12 months in tightly closed container.

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Flammability

EPOFLEX 500 is nonflammable material.

THINERCOAT 10 is flammable so do not expose to naked flames during application.

Health and Safety

The application of material 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 environmental and occupational health & safety standards ISO 14001 and OHSAS 18001.