

# Polypoxy CR

## Chemical resistant epoxy resin based coating

solvent free high build epoxy resin protective coating for concrete and steel



### CHARACTERISTICS

- ▶ Highly Chemical resistant
- ▶ Easy to apply
- ▶ Solvent free
- ▶ Water proof and protective coating
- ▶ High build Coating
- ▶ Hygienic and easy to clean
- ▶ Does not Contain Asbestos, Chromated copper arsenate and Lead



### DESCRIPTION

Polypoxy CR is a solvent free high build epoxy resin protective coating which provides a chemical resistant surface for concrete and steel.

### FIELDS OF APPLICATION

- internal protection of concrete or metallic storage tank, certain chemicals, oil & fuel
- chemical resistant floor and wall coating for manholes, treated sewerage lines, manufacturing units, breweries, etc

### ENVIRONMENTAL INFORMATION

Contributes toward satisfying LEED® v4 requirements of the EQ Credit- Low-emitting Materials (for the VOC content)

### APPLICATION INSTRUCTIONS

#### Surface preparation

New concrete surface to be treated must be 28 days old. Ensure that the moisture content of the surface is less than 5%. The surface shall be free from dust, dirt, curing compound and laitance. The cleaning shall be done by grit/captive blasting or mechanical grinding. The concrete should be sound and any cracks, pot holes shall be repaired with Polyoxy BF\* or Polyoxy NF\*. prior to the application of the coating make sure that the surface is absolutely dry.

#### Priming

The coating can be directly applied on new concrete surface, provided the surface preparation is done



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thoroughly to ensure good adhesion. For old and porous concrete, prime the prepared surface with Polyprime EP@ 4-5m<sup>2</sup>/L. The coating is applied when the primer is in a tacky to semitacky condition. However, in all circumstances, the coating shall be applied within 12 hours of application of the primer. If the primer surface is left open for more than 12 hours, then a fresh coat of primer has to be re-applied.

#### Mixing

Mix part A (resin) and part B (hardener) separately for 1 minute using a slow speed drill fitted with a paddle. Then add part B into part A and mix thoroughly for 2 - 3 minutes to achieve uniform consistency. Apply immediately after mixing.

#### Application

Polypoxy CR may be applied by brush, squeegee, roller or industrial sprayer. The coating shall be applied @0.3 L/ m<sup>2</sup> /coat to achieve a dry film thickness of 300 microns. As the coating is heavy bodied, it is advisable to apply extra coats on vertical than in horizontal, to avoid sagging of the product. Each subsequent coat shall be applied only after the previous coat dries off completely. After application the coating must be back rolled to reduce surface irregularities and improve bonding. Please contact our technical service team for specific requirement.

## CLEANING

Clean all equipments with a Polysolvent immediately after use. Hardened materials can be removed mechanically only.

## STORAGE & SHELF LIFE

Store in a cool, dry place and keep away from all sources of heat and sunlight. In tropical climates, store in air condition rooms. The shelf life is up to 12 months in unopened condition and if stored as per recommendations. Excessive exposure to sunlight, humidity and UV will result in the deterioration of the quality of the product and reduce its shelf life.

## HEALTH & SAFETY

As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

## CHEMICAL RESISTANCE

- sulphuric acid (10%)
- lactic acid (10%)
- nitric acid (10%)
- sodium hydroxide (50%)
- diesel
- battery water
- vegetable oil
- formaldehyde (40%)
- aviation fuel
- sea water
- gasoline

## LIMITATIONS

Polyoxy CR is prone to discoloration and colour deviation on UV exposure. This has no influence on the performance of the coating.

## COVERAGE

Polyprime EP	4-5 m <sup>2</sup> /L
Polyoxy CR	0.3L/m <sup>2</sup> / coat for 300 micron dry film thickness

## SUPPLY

Polyoxy CR	3.5L kit
Polyprime EP	5L & 15L kit
Polyoxy BF	3kg kit
Polyoxy NF	3kg kit
Polysolvent	5L & 20L pails

\* Refer to website for TDS

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Density, [g/cc]	1.45±0.05	ASTM D 1475
Color	Grey	-
Solid content, [%]	100	ASTM D 2697
Application life, [minutes]	30	-
Tack free time, [hours]	6	ASTM D 5895
Initial cure, [hours]	12	-
Full cure, [days]	7	-
Adhesion strength, [N/mm <sup>2</sup> ]	≥ 2	ASTM D 4541 BS 1881
Water absorption, [%]	<0.05	ASTM D 570
Abrasion resistance, [mg]	<100	ASTM D 4060
Application temperature, [°C]	5 to 35	
Service temp, [°C]	5 to 70	

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

