



# Solvent free epoxy resin coating

High performance, durable, easy to clean floor and wall coating



- Excellent resistance to a wide range of chemicals
- Hygienic. Provides an impervious and seamless surface which is easy to clean
- Durable and hardwearing
- ► Easy to apply
- Available in a wide range of colors
- Solvent free, therefore odorless and can be applied in confined spaces
- Complies with class 2 of surface spread of flame as per BS 476



## DESCRIPTION

Polypoxy FC is a versatile, two component solvent free epoxy resin based floor and wall coating that provides a durable and impervious coating which is easy to clean and have excellent resistance to a wide range of chemicals.

## **FIELDS OF APPLICATION**

- warehouses and factory floors
- internal lining of storage tanks
- pump & generator rooms
- showrooms
- food and pharmaceutical industries
- parking decks, garages and car wash areas
- workshops and fabrication units.

## **ENVIRONMENTAL INFORMATION**

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

## **APPLICATION INSTRUCTIONS**

## Surface preparation

Surface preparation plays a vital role in determining the durability of any floor coating. Therefore proper care should be taken while executing it. The surface should be dry, free of any cement laitance, oil and grease, curing compound and any other contaminants, which may affect the bonding. Light mechanical scabbling, grit/captive blasting or grinding is recommended for cleaning the



1

surface of such contaminants. New concrete surfaces should be 28 days old and the moisture content on the surface must be less than 5%. Refurbishment of existing or old floors must be done with a suitable repair mortar, in order to ensure that the bond between the old substrate and the new flooring system is very good. Surface irregularities and blow holes shall be repaired with Polypoxy BF (Epoxy resin based blow hole filler and skimming mortar) or Polycrete ST (cementitious repair mortar). Alternatively an epoxy resin based scratch coat can be used when repairing larger areas (> 0.5m<sup>2</sup>). The surface should be vacuumed after carrying out the necessary cleaning for removing the dust debris left over after the cleaning process.

## Priming

On most new concrete floors priming may not be required. However for best adhesion, prime the prepared surface with Polyprime EP @  $4-5m^2/L$ . The coating is applied when the primer is dry. However, in all circumstances, the coating shall be applied within 24 hours of application of the primer. If the primer surface is left open for more than 24 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 FC can be applied using a brush/roller/air less spray/squeegee the product can also be poured and spread evenly on the floor with a squeegee. The coating will then be finished by rolling the surface with a roller. When the first coat achieves initial cure (i.e. after 24hours) apply second coat at right angles to the first. After application the coating must be back rolled to reduce surface irregularities and improve bonding. Care should be taken to ensure that a continuous film is achieved. For a non slip finish, broadcast non slip Aggregate No 3 into the primer coat or first coat of Polypoxy FC @ 0.3kg/m<sup>2</sup> and remove excess prior to application of next coat.

## **CLEANING**

Clean all tools & equiptments with Polysolvent immediately after use. Hardened materials can be removed mechanically only.

## COVERAGE

4 m<sup>2</sup>/L per coat for 250 microns Dry Film Thickness on smooth surface. Number of coats shall be determined as per the required final thickness.

## **STORAGE & SHELF LIFE**

Store all material in a cool, covered dry place. Do not expose the pails to direct sunlight and keep away from all sources of heat. In tropical climatic conditions, the product has to be stored in an airconditioned environment and protected from high humidity. The shelf life of the product is 12 months in unopened condition if stored as per the recommendations. Exposure to high temperature and humidity will result in considerable deterioration 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.

SUPPLY	
Polypoxy FC	5L & 15L kit
Polypoxy BF	3kg kit
Polycrete ST	25 kg bag
Polyprime EP	5L & 15L kit
Polysolvent	5L & 20L pail
Aggregate No. 3	25kg bag

## **TECHNICAL SPECIFICATION**

PROPERTIES	VALUES	TEST STANDARDS
Colour	grey (other colours available upon request	-
Density, [g/cc]	1.5±0.05	ASTM D 1475
Solid content, [%]	100	ASTM D 2369
Pot life @ 30°C, [minutes]	30	ASTM D 2471
Touch dry, [hours]	6	-
Over coating time, [hours]	24	-
Compressive strength @7 days, [N/mm²]	> 65	ASTM C 579
Flexural strength @7 days, [N/mm²]	> 19	ASTM C 580
Tensile strength @7 days, [N/mm²]	> 15	ASTM C 307
Bond strength @7 days, [N/mm²]	> 2.5	ASTM D 4541
Abrasion resistance, [100cycles] [mg]	<50	ASTM D 4060
Initial cure, [hours]	24	-
Full cure, [days]	7	-
Shore D Hardness	80±5	-
Application temperature, [°C]	5 to 35	-
	5 3 0 0 ( ) 1	

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.

**Henkel Polybit Industries Ltd.;** PO Box: 293, Umm Al Quwain, UAE Tel:+971(6)76 70 777; Fax:+971(6)76 70 197; henkelpolybit@henkel.com **Henkel Polybit Industries Ltd.;** PO Box: 5911, Dammam-31432, KSA Tel:+96613808 4061 / 62, Fax: +966 13 812 1164; polybitdammam@henkel.com www.henkelpolybit.com

366

Henkel