

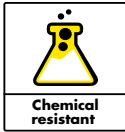
Polypoxy CM

Ceramic epoxy resin coating

To protect metal surface against abrasive and corrosive agents.

CHARACTERISTICS

- ▶ Excellent resistance to a wide range of chemicals & solvents
- ▶ Excellent water immersion properties.
- ▶ Excellent resistance to high temperature cathodic disbanding.
- ▶ Excellent adhesion, abrasion and wear resistance.
- ▶ Durable, self priming, high build with smooth sprayable consistency.
- ▶ Solvent free - No VOC's
- ▶ Good sag resistance



DESCRIPTION

Polypoxy CM is a versatile two component solvent free ceramic epoxy resin coating , it is designed to protect metal surface against abrasive and corrosive agents, it provide a durable and impervious coating which has excellent water immersion properties and have excellent resistance to a wide range of chemicals.

FIELDS OF APPLICATION

- protection and lining for pipes, valves and fittings used in buried or immersed services
- Resurfacing and repairing of worn or corroded metal parts
- protecting metal surfaces against abrasive and corrosive agents
- used as protective coating for offshore structures, concrete and sheet pilings, etc.
- lining for crude oil tanks, water ballast tanks and free spaces etc

APPLICATION INSTRUCTIONS

Surface preparation for concrete

Surface preparation plays a vital role in determining the durability of any protective 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 surface of such contaminants. New concrete surfaces should be 28 days old



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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 or Polypoxy NF. Alternatively an epoxy resin based scratch coat can be used when repairing larger areas (> 0.5m²). The surface after carrying out the necessary cleaning shall be vacuumed for removing the dust debris left over after the cleaning process. Ensure that the moisture content in the substrate is below 5%.

Surface preparation for steel

The performance of a coating is significantly influenced by its ability to adhere properly to the substrate material. Residual millscale on steel surfaces is an unsatisfactory base to apply modern, high performance protective coatings and is therefore removed by abrasive blast cleaning. Other surface contaminants on the rolled steel surface, such as oil and grease are also undesirable and must be removed before the blast cleaning process.

Priming

On most new concrete floors priming may not be required. however for best results, prime the prepared surface with Polyprime EP @ 4-5m²/L. The coating is applied when the primer is in touch dry 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. On a steel substrate the first coat should be applied immediately after cleaning to prevent rusting or contamination.

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. Part mixing is not recommended since the components are supplied in premixed kits.

Spray system:

- two component abrasion resistant airless equipments with a minimum compression ratio of 60:1.
- nozzle 3 to 4 mm.
- fan width 50 to 60°C, depending on the structure to be coated.
- Spraying pressure: 210 psi.
- product temperature: $\geq 25^{\circ}\text{C}$. for cartridge system:
- pre-heat cartridges to 50°C .
- Set product pressure to approximately 2 bar and air pressure to approximately 5 bar.

The coating shall be applied at the rate of 3-4m²/L/coat and shall be applied in minimum two or more coats. If application is interrupted the spray gun should be flushed within 5 minutes with a suitable cleaner, from the flushing pump. multiple coat application may be carried out, once the film has gelled, but not cured beyond the maximum recoat time. If this time has elapsed, light abrasive blasting is required, followed by a solvent wash to remove any abrasive residues. Brush & roller applications are recommended for sport repair and stripe coating.

COVERAGE

4 m²/L per coat for 250 microns dry film thickness on smooth surface.

CLEANING

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

SUPPLY

Polypoxy CM	0.5L & 10L kit
Polyprime EP	5L & 15L kit
Polypoxy BF	3kg kit
Polypoxy NF	3kg kit
Polysolvent	5L & 20L pail

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. For safe handling information on this product, consult the material Safety data Sheet (MSDS).

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Colour	Black	-
Finish	Glossy	-
Density, [g/cc]	1.30±0.05	ASTM D 1475
Solid content, [%]	100	ASTM D 1644
Pot life, [minutes]	40	-
Over coating time	Min: 6-8 hrs Max: 7 days	-
Immersion time, [hours]	Water: 36 Buried: 24	-
Heat resistance, [°C]	>120	-
Application temperature, [°C]	15 to 40	-

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.