ACALOR

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PML Epoxy Coating HB

Introduction

PML Epoxy Coating HB is a low odour, non-taint, solvent free epoxy system specially formulated for application to vertical and overhead surfaces. It can be applied by brush or roller to give a film thickness of 150 - 170 microns per coat.

The high build properties of **PML Epoxy Coating HB** ensure that two coats are normally sufficient to give a glossy tile-like impermeable finish that can be easily cleaned and decontaminated.

PML Epoxy Coating HB has excellent resistance to water and many chemicals including dilute acids, alkalis, salts, detergents, oils and fats. Resistance to mild solvents such as white spirit, petrol and kerosene is good but is limited to more powerful solvents such as ketones and aromatic/chlorinated hydrocarbons.

N.B. Whilst **PML Epoxy Coating HB** can be applied to floors, the specially formulated **PML Epoxy Coating** is the preferred material.

PML Epoxy Coating HB is available in a standard range of attractive colours, but is not primarily a decorative wall finish.

It is essential that good house-keeping practices are maintained at all times to maximise the performance of **PML Epoxy Coating HB.**

Typical Applications

Food dairy and soft drink industries, abattoirs, breweries, chemical plant and nuclear installations.

Method of Use

Storage

All materials must be stored prior to use under cover, preferably in a dry heated store. Materials stored at low temperatures (below 10°C) become more viscous and thus difficult to mix and apply. Do not store below 5°C.

If crystals are observed due to low temperature storage, contact APML Technical Sales Department.

Surface Preparation

Concrete and Sand/Cement Render

New surfaces must be fully matured, dry and free from laitance. It is essential that all contaminants such as mould, oil and surface laitance are removed. The preferred method of surface preparation is light grit-blasting to produce a slightly textured surface similar to medium sandpaper. All traces of dust must be removed by vacuum cleaning.

Where necessary small blowholes should be filled with a 'Scrape Coat' consisting of a mixture of Ordinary Portland Cement and **PML Synthetic Latex** (Data Sheet No. 621). The latter should be allowed to cure for a minimum period of two days, and then sanded flush before application of **PML Epoxy Coating HB.**

Larger blowholes and surface defects (above 6mm diameter) should be filled with **PML Epoxy Cement** (Data Sheet No. 626). This should be allowed to cure overnight and then sanded flush prior to coating.

Brickwork

Surfaces must be clean, dry and free from dust. It is essential that joints are flush pointed. If necessary existing joints should be raked out to a depth of about 5mm, and subsequently flush-pointed with **PML Synthetic Latex Cement** (Data Sheet No. D615). Allow to cure at least 7 days before applying **PML Epoxy Coating HB.**

Blockwork

Joints must be flush-pointed or treated as described under 'Brickwork' above. The surface of the blockwork should be sealed using a 'Scrape Coat' consisting of a mixture of Ordinary Portland Cement and **PML Synthetic Latex** (Data Sheet No. 621). Allow the Scrape Coat to cure for a minimum of 2 days, sand flush and remove dust with a vacuum before applying **PML Epoxy Coating HB.**

Mild Steel

Grit blast to SA 2½ standard. If the steel can be completely coated within four hours of grit-blasting, the first coat of **PML Epoxy Coating HB** may be applied direct without a special primer.

If it is not possible to coat within this period a good quality Epoxy/Polyamide zinc-rich primer should be applied and allowed to cure for the manufacturers' recommended period before applying **PML Epoxy Coating HB.**

Ambient Temperature

The ambient temperature should be at least 10°C during application and curing. If necessary heating should be applied sufficiently in advance of the time of application to ensure that the temperature of the substrate and surrounding air is at least this level before commencing work.

Application of PML Epoxy Coating HB

PML Epoxy Coating HB is supplied as a two part pack consisting of pre-weighed Base (coloured) and Hardener components.

Add the entire contents of the Hardener container (ensuring that it is completely emptied) into the Base container. Stir **very thoroughly** with a palette knife or preferably a mixing paddle fitted to a slow speed electric drill. Ensure no unmixed material remains on the sides or bottom of the container preferably by emptying the material into another container and re-mixing.

Apply the thoroughly mixed material in a uniform way by brush or roller to the prepared surface at a thickness of 150 - 170 microns. If application is by roller, finally lay off with light upward strokes of a brush. Normally two coats are applied, the second coat being applied after the first coat has become almost hard (typically 12 - 24 hours).

If it is not possible to apply the second coat within this time period (ie. 24 hours) then it is essential that the first coat is lightly abraded with a belt sander in order to provide a mechanical key.

All traces of dust must be removed by vacuum cleaning.

Cleaning

All tools and mixing vessels should be cleaned immediately after use with **PML Resin Cleaner** (Data Sheet No. 610), acetone or similar solvents.

Technical Specification

General data for guidance purposes only (Approximate figures)

Packing	2 kg pre-weighed packs
Density of mixed material	1.47 kg/litre
Volume of pack	1.36 litres
Coverage per pack (one coat)	
Concrete	6 - 7 m²
Sand/Cement render	6 - 7 m²
Iron and steel	8 - 9 m²
Brickwork, blockwork	4 - 6 m²
Film thickness per coat	150 - 170 microns
Pot life	25 minutes at 20°C
Curing time	
At 20°C	Tack-free 8 hours
	Hard dry 16 hours
At 10°C	Tack-free 16 hours
	Hard dry 1-2 days
Shelf life	12 months minimum

Physical Properties (Approximate figures)

Modulus of elasticity	1000 N/mm²
Elongation at yield	3 - 4%
Adhesion	
Concrete, Sand/cement render, brickwork, blockwork	Stronger than the substrate provided surfaces adequately prepared
Mild steel	Minimum 7 N/mm² to grit-blasted surfaces

Thermal Properties (Approximate figures)

Coefficient of linear thermal expansion per °C	60×10^{-6}
Maximum service temperature	50°C Continuous 80°C Spasmodic
Resistance to steam cleaning	Not resistant

Chemical Resistance

PML Epoxy Coating HB is resistant to the effects of a wide range of chemicals however it is important that advice is sought from the **APML Technical Sales Department** before the product is specified.

Health and Safety

This product contains substances that are classified as hazardous according to the Chemicals (Hazard Information and Packaging for Supply) Regulations, 1994 (as amended). The product is labelled in accordance with these regulations and further information regarding health hazards, handling, storage etc. is detailed in the Material Safety Data Sheet(s). In addition to considering the advice given by APML, all users must conform to the Control of Substances Hazardous to Health Regulations, 1994 (as amended).

All coverages and thicknesses quoted are nominal and will be affected by substrate profile and porosity.

The information in this Data Sheet, given in good faith, is based on results gained from experience and tests. Since application and use are beyond our control, no condition or warranty is given covering the results from the use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept any responsibility for any loss or damage, howsoever caused arising from the said use.