

MasterEmaco[®] 2525

Solvent free epoxy binder, structural adhesive and general purpose primer

DESCRIPTION

MasterEmaco 2525 is a solvent free, high performance, versatile epoxy binder that can be used to produce a range of epoxy resin based mortars or as a primer for both flooring and waterproofing products. **MasterEmaco 2525** can be applied to both dry and damp surfaces and adheres to most substrates after proper preparation.

RECOMMENDED USES

- Structural bonding of new to old concrete
- Production of epoxy resin mortars for floor toppings
- Production of epoxy resin mortars to grout bolt holes
- Steel bonding
- Rapid structural repair of concrete
- Grouting dowels
- Segmental bonding mortar
- Priming of concrete floors prior to applying Mastertop Flooring Systems and MasterSeal Membrane Systems to achieve structural bond

FEATURES AND BENEFITS

- **Adheres to wet or damp surfaces** - Wide application area from mortars to primers and adhesives.
- **Solvent free** - Low VOC and non-shrink
- **Pre-proportioned packaging** - No job site errors
- **Multi-purpose binder** - Many uses
- **Low viscosity** - Easy to apply as primer
- **High abrasion and chemical resistance** - Can be used as wearing surface
- **Approved to AS/NZS 4020:2002** - Suitable for contact with Potable Water
- **Cures hard at low temperatures** - Wide application range

PERFORMANCE DATA

MasterEmaco 2525	
Compressive Strength:	@ 1D - 58 MPa @ 7D - 95 MPa
Compressive Modulus:	3.4 GPa
Flexural strength:	@ 7D - 40 MPa
Tensile strength:	@ 7D- 60 MPa
Heat deflection temp:	80°C
Compressive modulus:	3.4 GPa

Bond strength:	>2.5 MPa (concrete failure)
Abrasion Resistance (ASTM C779)	0.24mm/30 mins.

MasterEmaco 2525 with Filler F1

Consistency	Fluid Grout
F1 Filler for 1L of Binder	2 Litres
Compressive strength @ 7D	80MPa
Tensile strength @ 7D	50MPa
Consistency	Flowable Mortar
F1 Filler for 1L of Binder	3 Litres
Compressive strength @ 7D	75MPa
Tensile strength @ 7D	42MPa
Consistency	Thixotropic Mortar
F1 Filler for 1L of Binder	4 Litres
Compressive strength	64MPa
Tensile strength	36MPa

Paste for Precast Segment Bonding

Mixed Density, (kg/L)	1.70 ± 0.1
Pot Life in Minutes (ASTM C881: 2010) :	@ 23°C 30 @ 4°C 120
Compressive Strength @ 7D (N/mm ²):	70
Tensile Strength @ 7D (N/mm ²) ASTM C307 :	14
Bond Strength @ 7D (N/mm ²) (Pull Off by <i>Dyna Tester</i>), :	> 6
Slant Shear Bond Strength, @ 7D (N/mm ²) BS EN 12615: 1999,	> 33

Chemical Resistance

MasterEmaco 2525 resists most common organic and inorganic acids in diluted form, also resistant to alkalis, water, oils, grease, etc.

PROPERTIES

	Part A	Part B	Mixed
Supply Form	Liquid	Liquid	Liquid
Colour	Clear	Amber	Amber
Mix Ratio			3:1 pbv
Density (Mixed)			1.1kg/L
Application Temperature:	4°C - 35°C		

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APPLICATION

Surface preparation

Remove all grease, oil, dust, residual curing compound, mould release agent or other contaminant that could impair adhesion. Laitance should preferably be removed by light sweep blasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas.

Spalled concrete should be cut back to sound concrete and made good with **MasterEmaco 2525** mortar. Conventional concrete curing compounds should be removed before application.

Mixing

Proportion part kits accurately mixing only what can be used in less than 30 minutes. Thoroughly stir Part A, add Part B (3:1 parts by volume respectively) and blend thoroughly using a slow speed mixer fitted with a suitable paddle. When being used as a grout or mortar, only clean kiln dried sand may be mixed in. The maximum aggregate size should approximate to 1/3 of the minimum required depth. Add **MasterTop X1** color packs into floor screeds to ensure color throughout flooring system. The following mix ratios are given as a guide. Consideration should be given to the volume of mortar and potential problems associated with exothermic reactions.

Application

The **MasterEmaco2525** mortar or grout may be placed on to the surface using standard grouting or trowelling techniques.

Note: The surface needs to be primed when using "dry" mortars. Use **MasterEmaco2525** Binder only to prime and apply wet on wet, when aggregate ratio is over 1-3, resin to aggregate. If using as a bonding material for new to old concrete or for adhering **MasterTop 330** ensure that the **MasterEmaco 2525** is still tacking at time of new concrete or mortar is applied. If **MasterEmaco 2525** has the possibility to

fully cure before the subsequent topping is applied when used as a primer, seed with F1 or F5 Filler.

Curing

Cure time will vary depending on the ambient temperature, quantity mixed and placed, and the rate of sand addition. **MasterEmaco 2525** will have fully cured after 7 days at 23°C.

ESTIMATING DATA

Consistency	Filler Per 1L of Binder	Total Yield
Grout	2 litres	2.25 litres
Flowable Mortar	3 litres	3 litres
Thixotropic Mortar	4 litres	4 litres
Segmental bonding mortar		
PTA 3.75L	PTB 1.25L	Filler F1A 17.5Kg

Priming: coverage 4-6m²/litre.

Wet to dry bonding concrete: approximately 4m²/litre depending on profile of concrete.

PACKAGING

MasterEmaco 2525 comes in 5 litre kit sizes

SHELF LIFE

MasterEmaco 2525 can be stored in tightly closed original containers for 12 months at moderate temperature.

PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

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