

# MasterEmaco 2525

Solvent free epoxy binder and structural adhesive

## **Material 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. **MasterEmaco 2525** can be applied to both dry and damp surfaces and adheres to most substrates after proper preparation.

# **Areas of Application**

- 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
- Priming of concrete floors prior to applying Mastertop Flooring and MasterSeal Membrane Systems

#### **Characteristics and Benefits**

- Adheres to wet or damp surfaces wide application area.
- 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 4020:2018 (tested to the maximum exposure level) - suitable for contact with potable water.
- Cures hard at low temperatures wide application range.

## **Properties**

Mixed resin and hardener only	@ 23°C
Compressive Strength 7 days	95 MPa
Flexural strength 7 days	40 MPa
Tensile strength 7 days	60 MPa
Compressive Strength 24 hrs	58 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.
Mortar Performance (A+B+filler)	@ 23°C
Fluid Grout F1 Filler	
Compressive strength	80MPa
Tensile strength	50MPa
Flowable Mortar F1 Filler	
Compressive strength	75MPa
Tensile strength	42MPa
Mortar F1 Filler	
Compressive strength	64MPa
Tensile strength	36MPa

#### Chemical Resistance

MasterEmaco 2525 resists most common organic and inorganic acids in diluted form, also resistant to alkalis, water, oils, grease, etc. Chemical resistance depends on the chemicals involved, their concentration, temperature and degree of exposure. Good housekeeping practices such as immediate clean-up of all spillages will greatly extend the service life.

	Part A	Part B	Mixed
Supply form	Liquid	Liquid	Liquid
Colour	Clear	Amber	Amber
Mix Ratio			3:1 pbv
Density (Mixed)			1. 1 kg/L
Application Temperature: 5°C - 35°C			

# **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 captive shotblasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas.



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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 XI colour packs into floor screeds to ensure colour 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 MasterEmaco 2525 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 I-3, resin to aggregate. Should MasterEmaco 2525 cure when priming, seed with FI 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**

For I litre of binder volume of FI filler		Total
		Yield
Grout	2 litres	2.25 litres
Flowable Mortar	3 litres	3 litres
Mortar 4 litres		4 litres

Priming: coverage 4-6m<sup>2</sup>/litre.

Wet to dry bonding concrete: approximately 4m<sup>2</sup>/litre depending on profile of concrete.

### **Packaging**

MasterEmaco 2525 comes in 2 litre, 20 litre and 800L kit sizes.

MasterEmaco 2525 wet film thickness				
L	Thickness	m <sup>3</sup>	pails	m²/mm
	in mm /m <sup>2</sup>		/m <sup>3</sup>	thickness
20	20mm	(0.02)	50	20 m <sup>2</sup>
5	5mm	(0.005)	200	5
800	800	(0.8)	1.25	800

## **Storage & Shelf Life**

**MasterEmaco 2525** can be stored in tightly closed original containers for 24 months at moderate temperature.

#### **Precautions**

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



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#### **Disclaimer**

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