

# MasterEmaco P 157

SBR polymer based bonding and modifying agent for concrete and mortars

# **Material Description**

MasterEmaco P 157 is an aqueous emulsion of styrene-butadiene copolymer latex, specially formulated for use in cementitious mixtures to improve wear resistance, durability, waterproofing and bonding properties. MasterEmaco P 157 is also compatible with sulphate-resisting or high alumina cement and gypsum plaster

# **Areas of Application**

MasterEmaco P 157 is recommended for use:

- With cement as a bonding slurry
- In weather resistant exterior or interior renderings
- In floor screeds and toppings, or plasters for improved chemical resistance
- In repair of honeycombed and spalled concrete, beams and precast elements

#### **Characteristics and Benefits**

- Easy to use add to mixing water to improve mortars and screeds
- Economical can create a range of polymer modified mortars and screeds with simple ingredients and lower cement contents than non-modified mortars
- Improved workability mortars are easier to apply
- Addition of polymer improved bonding and impermeability and resistance to salts and other chemicals
- Controlled shrinkage reduced cracking tendency of modified mortars

### **Properties**

Typical mortar modified with MasterEmaco P 157

Typical modified With laster Emaco 1 137					
	28 days				
Compressive Strength	55-65 MPa				
Flexural Strength	10-13 MPa				
Tensile Strength	5-7 MPa				
Bond (to substrate)	>1.5 MPa				
VOC content SQAQMD 304-9I	50 g/L				

The performance data is typical and based upon controlled labor-atory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

Supply form	milky white liquid		
Specific gravity	1.01		
pH value	~ 10.5		
Storage temperature	sensitive to frost		
Application temperature	not below 5°C		

### **Application**

#### **Surface Preparation**

The substrate must be clean, sound and free of dust and loose particles, cement laitance, oil, grease, mould release oil or curing compounds which must be removed from concrete surfaces by using gritblasting or other means and a surface profile of CSP 3 and above is desired.

Clean steel reinforcing bars to a minimum grade of SA 2 according to ISO 8501-1 / ISO 12944-4. For extra protection, or when the steel is left exposed before repair work is completed, apply MasterEmaco P 5000 AP active protection cement based primer. When repairing spalled or deteriorated concrete, ensure that the concrete has been cut back to sound material and square edged.

Before applying MasterEmaco P 157, be sure to pre-wet the concrete substrate thoroughly to saturate the pores completely with water. During application of MasterEmaco P 157, the temperature of the substrate should not be below 5°C and the ambient temperature stays above that for the next 12 hours. To avoid too high a surface temperature, it is advisable to shade application areas.

#### **Mixing**

Stir well before addition to mortar mixes. Mortars should be mixed in a pan type mixer or by means of a low speed mixer (300-600rpm) with a helical paddle. Hand mixing is not recommended.



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#### **Method of Use**

Bonding slurry (priming) - apply a slurry onto the still damp substrate, with a stiff brush. The mortar must be placed weton-wet. If the slurry does dry, a further slurry coat must be applied.Renderings and repair mortars (to vertical surfaces) - after brushing the bonding slurry onto the prepared surface, apply immediately <code>MasterEmaco P I57</code> mortar in average thickness of I0mm, as thicker layers tend to sag.

However, several layers can be applied in quick succession. If thicker layers are applied, suitable formwork has to be used.

#### Screed and toppings (to horizontal surfaces)

Always place screed, topping or patching mortar onto the still wet bonding slurry. Use low water-cement ratio for thick layers of mortar. Depending on use and exposure of the flooring mortar, premix the mixing water with MasterEmaco P I 57 in ratio of I part MasterEmaco P I 57 to I-4 parts of water by volume.

	Sand	Cement	MasterEmaco P 157	Water	Approx
Application	kg	kg	litre	litre	Yield (thickness) /m²
Topping or large overlays,	21	7	2.5	1.25	10-12mm
Concrete & Masonry Repairs, Setting & Grouting Pavers & Stone	21	7	3.8		10-2mm

Levelling	12	6	3.8		3mm
concrete					
Plaster &	12	6	- 1	3	5-7mm
Stucco					
Bond slurry	7	7	3.8		6m²@1m
					m

# **Curing**

Freshly applied screeds and renderings, when mixed with MasterEmaco P 157, should be kept damp and be protected from direct sunlight, rain, wind or frost, until sufficiently hardened. Excessive rapid drying may cause shrinkage, insufficient strength and other defects.

# **Packaging**

MasterEmaco P 157 is available in a 5 litre and 20 litre pails.

# **Storage & Shelf Life**

MasterEmaco P 157 has a shelf life of 12 months. Store out of direct sunlight and discard if subject to freezing.

#### **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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