

MasterEmaco P157

SBR acrylic based bonding and polymer modifying agent for concrete and mortars

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.

RECOMMENDED USES

MasterEmaco P 157 is the ideal SBR-latex 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
- Water resistant screeds in wet areas

FEATURES 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 variations with lower cement contents
- **Improved workability** – mortars easier to apply
- **Addition of acrylic** - Improved bonding and impermeability and resistance to salts and other chemicals
- **Controlled shrinkage** - Reduced cracking tendency

PROPERTIES

Typical mortar modified with MasterEmaco P 157

	28 days
Compressive Strength	55-65 MPa
Flexural Strength	10-13 MPa
Tensile Strength	5-7 MPa
Linear temp. expansion coefficient at 20°C	12.8x10 ⁻⁶ mm/m°K
Bond (to substrate)	>1.5 MPa
Frost/Thaw resistance	Resists alkalis, chlorides, lactic

	acids, sugar etc.
VOC content SQAQMD 304-91	50 g/L

The performance data is typical and based upon controlled laboratory 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	approx 10.5
Storage temperature	sensitive to frost
Application temperature	not below 5°C
Solids Content	47%

APPLICATION DIRECTIONS

Substrate Condition

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.

Steel reinforcing bars clean 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 N 5000 CI** active protection cement based primer. When repairing spalled or deteriorated concrete, ensure that the concrete has been cut back to sound material.

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. 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.

Method of use

Bonding slurry (priming) - Apply a slurry onto the still damp substrate, consisting of 1 part **MasterEmaco P 157** and 1 part by volume of cement, with a stiff brush. The mortar must be placed wet-on-wet. If the slurry does dry, a further slurry coat must be applied.

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Renderings and repair mortars (to vertical surfaces) - After brushing the bonding slurry onto the prepared surface, apply immediately **MasterEmaco P 157** modified mortar (1:2 to 1:3), in average thicknesses of 10mm, 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 157** in ratio of 1 part **MasterEmaco P 157** to 1-4 parts of water by volume. For extreme conditions, i.e. if adhesion, waterproofing, vapour resistance or chemical resistance is critical, the recommended ratio is 1:1, in case of low loading or stress, mix 1:4.

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 P157 is available in a 25 Liter pails and 200 Liter drums.

SHELF LIFE

MasterEmaco P157 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, please make sure that you obtain a copy of the Master Material Safety Data Sheet (MSDS) from our office or our website.

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by commonwealth or State legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

NOTE

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