

# MasterEmaco® P158

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

## DESCRIPTION

**MasterEmaco P158** 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 P158** is also compatible with sulphate-resisting or high alumina cement and gypsum plaster.

## RECOMMENDED USES

**MasterEmaco P158** 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 P158

	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 <sup>-6</sup> 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 P158**, be sure to pre-wet the concrete substrate thoroughly to saturate the pores completely with water. During application of **MasterEmaco P158**, 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 P158** 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.



We create chemistry

# MasterEmaco<sup>®</sup> P158

**Renderings and repair mortars (to vertical surfaces)** - After brushing the bonding slurry onto the prepared surface, apply immediately **MasterEmaco P158** 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 P158** in ratio of 1 part **MasterEmaco P158** 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 P158**, 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 BASF Material Safety Data Sheet (MSDS) from our office or our website.

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF Construction Chemicals publication are 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 law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF Construction Chemicals, are responsible for carrying out procedures appropriate to a specific application.

### BASF Construction Chemicals offices in ASEAN

Singapore	Malaysia	Indonesia	Thailand	Vietnam	Philippines	Hong Kong
Tel: +65-6861-6766	Tel: +60-3-5628-3888	Tel: +62-21-526-2481	Tel: +66-2-769-8564	Tel: +84-650-374-3100	Tel: +63-2-811-8000	Tel: +852-2408 4400
Fax: +65-6861-3186	Fax: +60-3-5628-3776	Fax: +62-21-526-2493	Fax: +66-2-769-8584	Fax: +84-650-374-3200	Fax: +63-2-838-1025	Fax: +852-2408-4401