

MasterEmaco[®] P 158

SBR based bonding and polymer modifying agent for concrete and mortars

DESCRIPTION

MasterEmaco P 158 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 158 is also compatible with sulphate-resisting or high alumina cement and gypsum plaster.

RECOMMENDED USES

- **MasterEmaco P 158** 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
- In tile or mosaic bedding compounds for bedding tiles or re-fixing slip bricks

FEATURES AND BENEFITS

- Water resistant
- Excellent adhesion to concrete, steel and brick
- High abrasion resistance
- Good resistance to salts, mineral oils and many other chemicals
- Reduces bleeding
- Greatly increased durability
- High flexibility
- Plasticizing effect and reduced shrinkage
- Highly increased tensile strength
- Non-toxic. Can be used in contact with potable water
- Improved corrosion protection
- Lower water/cement ratio
- Promotes high early strength in mortars

PROPERTIES

Supply form:	Liquid
Colour:	Milky white
Specific gravity:	1.01 kg/L
pH value:	approx 9 – 10.5
Storage temperature:	sensitive to frost

Application temperature: not below 5°C

Toxicity: non-toxic

APPLICATION

Substrate Preparation

The substrate must be clean, sound and free of dust and loose particles. Cement laitance, oil, grease, mould release oil or curing compounds must be removed from concrete surfaces by using gritblasting or other means. Steel surfaces should be degreased with a suitable solvent and/or treated by gritblasting or wire brushing where necessary.

Steel rebars must also be clean from grease, oil or rust and ideally treated by gritblasting. Corroded rebars should be protected using MasterEmaco P 5000AP (refer separate data sheet). When repairing spalled or deteriorated concrete, ensure that the concrete has been cut back to sound material. In cases where corrosion is absent, wire brushing to a clean bright surface is sufficient.

Before applying **MasterEmaco P 158**, be sure to pre-wet the concrete substrate thoroughly to saturate the pores completely with water. During application of **MasterEmaco P 158**, 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 use. Preferably, mixing should be done in an efficient pan type mixer or by means of a low speed drill with appropriate paddle. Hand mixing is not recommended.

Application Method

Bonding slurry (priming) - Apply a slurry onto the still damp substrate, consisting of 1 part **MasterEmaco P 158** and 2 parts by volume of cement, mixed to a lump-free creamy consistency. A stiff brush should be used to work the bonding slurry well into the damp surface. This slurry should not be applied in a thickness exceeding approximately 2mm. The mortar must be placed wet-on-wet. If the slurry does dry, a further slurry coat must be applied.

Renderings (to vertical surfaces) - After brushing the bonding slurry onto the prepared surface, apply immediately **MasterEmaco P 158** modified mortar, in average thicknesses of 10 mm, as thicker layers tend to sag. However, several layers can be applied in quick succession. If



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MasterEmaco[®] P 158

thicker layers are applied, suitable formwork has to be used.

To provide good mechanical bond, scratch the freshly applied coat of rendering when the next coat is to be applied the following day.

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.

Repair mortars (to horizontal and vertical surfaces) - Mix **MasterEmaco P 158** with sand/cement in ratio of 1:3. The thinner the repair patch is, the higher the dosage rate of **MasterEmaco P 158**. Apply the **MasterEmaco P 158** modified mortar onto the still tacky bonding slurry.

Tile or mosaic bedding compound - Dampen the substrate as well as the tiles. Apply a bonding slurry to the damp substrate and to the back of the tile. Before the slurry starts to dry, plaster the tile with mortar in the required thickness and firmly press to the floor or wall to ensure full contact. Strike off surplus mortar and do not disturb until set. For thin bed applications, press the tiles straight onto the substrate using only the bonding slurry. Strut tile surfaces until set.

ESTIMATING DATA

Depending on type of application (refer to "Application Method").

CURING

Freshly applied screeds and renderings, when mixed with **MasterEmaco P 158**, 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.

CLEANING

Tools should be cleaned with water before the material hardens.

PACKAGING

Available in 5 L, 25L pails and 200L drums

SHELF LIFE

MasterEmaco P 158 should be stored out of direct sunlight. If kept in a dry place in tightly closed original packing above freezing point, it has 12 month shelf life.

GENERAL GUIDELINES

Materials for **MasterEmaco P 158** modified mixtures:

- Sand should be washed, well graded and free from excessive fines.
- Although **MasterEmaco P 158** is compatible with high alumina cement, hardening will be delayed. Always use fresh cement.
- Expansion joints in the substrate must be carried through the **MasterEmaco P 158** modified mixture.
- **MasterEmaco P 158** modified mixtures should be applied to damp, but never wet, surfaces. Where running water is present, this must first be sealed and plugged.
- Do not over trowel and avoid re-trowelling of setting mortar.
- **MasterEmaco P 158** may float to the surface and impair the adhesion of subsequently applied materials.
- Do not work at temperatures below 5°C.

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.

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STATEMENT OF RESPONSIBILITY

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PT BASF Indonesia

DBS Bank Tower 27th Floor

Ciputra World 1 Jakarta

Jl. Prof. Dr. Satrio Kav. 3-5

Jakarta 12940

Phone: +6221 29886000

Website: www.master-builders-solutions.basf.co.id