**MasterEmaco® P 157**

**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 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

**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 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>55-65 MPa</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>10-13 MPa</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>5-7 MPa</td>
</tr>
<tr>
<td>Bond (to substrate)</td>
<td>&gt;1.5 MPa</td>
</tr>
<tr>
<td>VOC content SQAQMD 304-91</td>
<td>50 g/L</td>
</tr>
</tbody>
</table>

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.

**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 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.

**Method of use**
- **Bonding slurry (priming)** - apply a slurry onto the still damp substrate, with a stiff brush. The mortar must be placed wet-on-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 MasterEmaco P 157 mortar in average thickness of 10mm, as thicker layers tend to sag.
**MasterEmaco® P 157**

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Sand kg</th>
<th>Cement kg</th>
<th>MasterEmaco P 157 litre</th>
<th>Water litre</th>
<th>Yield (thickness) /m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topping or large overlays,</td>
<td>21</td>
<td>7</td>
<td>2.5</td>
<td>1.25</td>
<td>10-12mm</td>
</tr>
<tr>
<td>Concrete &amp; Masonry Repairs, Setting &amp; Grouting Pavers &amp; Stone</td>
<td>21</td>
<td>7</td>
<td>3.8</td>
<td></td>
<td>10-2mm</td>
</tr>
<tr>
<td>Levelling concrete</td>
<td>12</td>
<td>6</td>
<td>3.8</td>
<td>3mm</td>
<td></td>
</tr>
<tr>
<td>Plaster &amp; Stucco</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Bond slurry</td>
<td>7</td>
<td>7</td>
<td>3.8</td>
<td>6m²@1 mm</td>
<td></td>
</tr>
</tbody>
</table>

**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.

**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, please make sure that you obtain a copy of the BASF Safety Data Sheet (SDS) from BASF office or website.