

MasterEmaco[®] SBR ECO

Eco-Friendly SBR Latex for sustainable repair & waterproofing solutions.

DESCRIPTION

MasterEmaco SBR ECO is an eco-friendly blue coloured, Styrene-Butadiene co-polymer (SBR) latex liquid, free of APEO, formaldehyde, ammonia and low VOC. The product compliments MasterEmaco SBR 2, daily use SBR latex.

MasterEmaco SBR ECO, being environmentally friendly is safe to handle as neat liquid or with concrete for repair and waterproofing applications.

RECOMMENDED USES

- **Concrete repair:** Spalled concrete, repairing floors, beams and pre-cast slabs, chajjas etc.
- **Bond Coat:** For bonding new concrete to old concrete, plaster, stone/brick masonry.
- **Plaster repair:** For repairing plaster or making water proof plaster which is better than normal plaster.
- **Floor screeds and toppings:** Abrasion resistant and non-dusting floors.
- **Waterproofing:** Basements side walls and rafts, lift pits, inspection pits, sunken/overhead water tank, sunken portions of bathrooms and toilets, balconies, chajjas, exposed roofs before finished screed.
- **Other typical applications:** Bedding tiles, fixing or re-fixing slip bricks.

FEATURES AND BENEFITS

- **Eco-Friendly, safe to handle:** Free of APEO, Formaldehyde, Ammonia, Low VOC.
- **Multiple applications:** Robust product that is economical, easy to handle and store.
- **Easy to Mix:** Faster mixing to enhance worker efficiency.
- **Shrinkage/crack control:** High flexural / tensile strength to control cracking.
- **Mortar modifier-** Improved flexibility, no bleeding, lower water cement ratio and high resistance to water penetration.
- **Improves physical/mechanical properties** – higher abrasion resistance, good adhesion to building materials similar thermal characteristics to concrete.
- **Corrosion control:** Prevents corrosion of embedded steel.
- **High Dispersion technology:** Allows for better workability at slightly reduced water.

PROPERTIES

Aspect	Blue coloured, styrene butadiene co-polymer latex.
pH	8 ± 1
Relative density	1.02 ± 0.01 at 25°C
Solid content	37±1%

APPLICATION

Surface preparation

- Remove all loose concrete, grease, mould oil or curing compound from concrete and steel surfaces using wire brush, scrubber.
- Saw cut the concrete areas to a square or rectangular profile to a minimum 10mm depth at the extreme edges.
- Roughen the surface free of loose particles and dust and saturate with water.
- Remove excess/standing water.

Bonding slurry

- Mix 1½ parts cement to 1 part **MasterEmaco SBR ECO** by weight of cement.
- Mix to a lump-free creamy, consistency for 2-3 minutes by slowly adding **MasterEmaco SBR ECO**.
- Using a stiff brush, work the bonding slurry well into the damp surface. When the bond coat is tacky apply mortar/screed overlay.

As waterproofing slurry:

- Mix 2 parts cement to 1 part **MasterEmaco SBR ECO** by weight of cement.
- Mix to a lump-free creamy, consistency for 2-3 minutes by slowly adding **MasterEmaco SBR ECO**.
- Using a stiff brush, work first coat of waterproofing slurry well into the damp surface.
- After the first coat has dried, apply second coat at right angle to first followed by mortar/screed overlay. Average time gap between two coats is 3 to 4 hours.

Mix Design: Mortar & Screed.

- **Mix Design Repair Mortar:** 10 Litre of **MasterEmaco SBR ECO**: 50kg of Cement: 150kg of sieved sand: 10 litres of water.
- **Mix Design Floor Topping/Screed.** 10 Litre of **MasterEmaco SBR ECO**: 50Kg of

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Cement: 75Kg of sand: 75kg of coarse aggregate (6mm down): 10litres of water.

Mixing Process Mortar/Screed:

- Use fresh, lump free cement, well graded sand/aggregates free of excessive fines.
- Mix sand and cement and coarse aggregate in Pan Type mixer for 1 -2 minutes. Hand mixing is only permissible when the total weight of the mix is less than 25kg.
- Mix required quantity of **MasterEmaco SBR ECO** and water for 2 minutes in a separate container, to avoid excessive air entrapment.
- Finally, without delay, add the liquid mix slowly into the mixer containing the mixed powdered sand/coarse aggregate and cement until the required consistency is achieved.

Rendering to vertical surfaces

- Apply the bonding slurry to the prepared surface and then apply the **MasterEmaco SBR ECO** render onto the wet bonding slurry.
- **Application Thickness: 5 to 25mm.**
- Greater thickness can lead to slumping.
- Apply multiple layers in rapid succession, within 15 to 30 minutes of the previous layer.
- Finish the surface using a wooden float or steel trowel.
- Apply modified slurry coat on the first layer in case application of second layer is delayed to long time gaps.
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Screeds and toppings, applied to horizontal surfaces

- **Application thickness 10mm to 40mm.**
- The **MasterEmaco SBR ECO** modified mix should be placed over the still wet bonding slurry, well compacted by hand and trowelled to finish using a wooden float or steel trowel.

Curing:Moisture cure for 24 hours and then allow to dry slowly.

ESTIMATING DATA

Mixing ratios

Usage	Mixing Ratio
Bonding	1(polymer) :1.5(cement)
Waterproofing slurry	1(polymer) :2(cement)
Hand applied Repair mortar	1(polymer):5(cement):15(sand):1 (water)
Floor Screeds/PCC Topping	1(polymer):5(cement):7.5(sand):7.5 coarser aggregate:1 (water)

Coverage

Bonding Coat: 4 to 4.5m² for mix of 1Litre**MasterEmaco SBR ECO** and 1.5kg of cement.

Waterproofing slurry:2 m² in two coats for mix of 1 Litre **MasterEmaco SBR ECO** and 2kg of cement.

Repair Mortar/Concrete Screed: 10 Litre of **MasterEmaco SBR ECO** per 50kg of cement.

PACKAGING

MasterEmaco SBR ECO is supplied in 1, 5, 20Litre

SHELF LIFE

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.

PRECAUTIONS

It is highly recommended to use necessary PPE (Gloves, mask etc.,) during installation of the product. In case of Incidents of direct inhalation, causing dizziness/giddiness, loss of consciousness, contact with eyes etc, seek immediate medical advice. The requirements may vary depending on the application areas. Please ensure to have proper ventilation while working in confined areas. Contact Master Builders Solutions representative in case you need further details or refer to the material safety datasheet of the product to know more

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RESPONSIBILITY
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