

MASTER LATEX

STYRENE BUTADIENE LATEX

DESCRIPTION

MASTER LATEX is a single component emulsion of styrene butadiene co-polymer based latex, specially developed to improve the properties of cementitious compositions. MASTER LATEX when used in combination with standard quality of ordinary Portland cement enhances the mechanical properties such as bonding (adhesion) with various building materials, flexurals, compression and impact strength. MASTER LATEX improves the thin section fragility of cement when used as coating. It is resistant to hydrolysis hence can be used for external applications too.

TECHNICAL INFORMATION

CHARACTERISTICS

- Appearance : Single component, milky white pourable liquid
- pH value at 30⁰ C : 7.5 to 11
- Viscosity by Brookfield Viscometer : 100 CPS Max.
- Solids % : 45 ± 2%
- Specific Gravity : 0.99 to 1.03
- Durability with water : Dilutable in any proportion
(As per application)
- Mechanical Stability : Good
- Compatibility : Compatible with cement & concrete admixtures
- Storage Stability : Excellent
- Toxicity : Non – Toxic

ADVANTAGES

- Increases flexural and tensile strength
- Compressive strength is comparable with concrete
- Reduced shrinkage, water permeability
- Good bonding between old & new concrete
- High strength mortar with good resilience
- Durable structural repairs, restoration & waterproofing
- Improved abrasion resistant flooring

FEATURES

- Simple to use as it is a single component
- Cures to a hard, tough & wear resistant surface

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- Bonds (adheres) strongly to most surface types
- Can be applied to a uniform thickness coating on horizontal and vertical surfaces
- Allows trapped water (vapours) to escape and prevents blistering and adhesion failures
- Makes cement mortar or coating compact which prevents salt penetration into the concrete
- It is unaffected by UV light and prevents fading of concrete
- It acts as anti-corrosive for steel. It is highly durable even in continuous contact with water
- It is resistant to water, dilute acids and alkali solutions
- It is non-flammable & non-hazardous. Does not evolve toxic gases when exposed to fire
- Non-toxic to human being
- Most properties improve on ageing
- Resistant to fungus and micro-organism growth

USAGE

- Waterproofing of building, toilets sunken portion basement
- Waterproofing of water tanks and swimming pools
- Repairing of concrete and masonry walls-internal, external & terrace roofs by cement mortars
- Renovation and protection of concrete against corrosion and salt petrel
- As a bonding agent for old concrete to new concrete, industrial floor or floor duct nosing repair

SURFACE PREPARATION

- Surface preparation is the most important step before application to achieve desired results and avoid failures.
- The surface should be absolutely dry, free from dust coatings, loose particles, fungus, moss, oils, greases, mould-release agents & dirt. Clean the surface by scrapping & sand blasting to remove dirt & loose particles.
- Treat surface with 5%-10% hydrochloric acid, followed by complete neutralization with water, which will improve bonding of the coating. Oils, greases & mould-release agents can be cleaned with solvents.

DIRECTION FOR USE

1) AS A BOND COAT

Plaster to Plaster, Concrete to concrete, Plaster over brick masonry in the ratio of 1:1 (Master Latex : water) Prior to mixing prepare a mix of Latex and water and add cement to it.

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2) FOR WATERPROOFING

2 coats with the ratio of 1:4:7 to be applied with an interval of 6-7 Hrs. MASTER LATEX is first separately diluted with water by adding water to Master Latex. The diluted Master Latex is then added into the mixture & homogenized.

a) METHOD

1. On a clean & well prepared surface apply Master Latex cement slurry (Master Latex : Cement: 1: 1 Part by weight).
2. Apply Master Latex mortar by trowel to achieve uniform & smooth finish. Application of Master Latex modified mortar should be very fast as it cures fast.
3. Moist cure for 24 hours & then allow it to cure

b) PREPARATION OF MORTAR

Cement	: 1.00 Kg
Sand	: 2.50 Kg
Water	: 0.16 Kg
MASTER LATEX	: 0.20 Kg
DEFOAMER (if required)	: SILICONE TYPE (Dosage as per requirement)

- Deformers of silicone type (proprietary products) can be used but dosage depends upon the method of mixing & manufacturers recommendations. Adjust quality of water for workability if required. Do not add excess water.
- Increase the proportion of MASTER LATEX for more demanding situations.

SPECIFICATIONS

STRUCTURE REPAIR

- a) Remove all sealed / loose concrete to reach up to the concrete or reinforced structure and remove all loose dust by means of wire brush.
- b) Remove all dust particles by means of high jet water.
- c) Apply one coat of MASTER LATEX with cement (Ratio of MASTER LATEX : cement :1:1 PBW) on cleaned reinforcement & allow to dry for 2 - 3 hrs. Coverage: 60 + 5 sq.ft. / Liter / coat
- d) Apply MASTER LATEX coat i.e. mixture of cement: Master Latex (1:1 by PBW) on entire surface. Allow it to dry for 1-2 hrs. Coverage: 30 + 5 sq.ft. / lit / coat.
- e) Now prepare polymer modified mortar as given below and apply it on entire concrete substrate at 10mm or 20mm thickness as required.
Cement : 50 Kg
Sand : 125 Kg
Water : 8-10 Kg.
MASTER LATEX : 8-10 Kg.

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Apply above polymer mortar by hand pressing over tacky MASTER LATEX
f) Allow to cure above polymer mortar for one day.

CURING

Moisture cure for 24 hours allow to dry out

CLEANING

Tools & equipment's should be cleaned with water immediately after use.

COVERAGE

As bond coat	- 60± 5 sq. ft./lit/coat
As Waterproof Coat	- 30± 5 sq. ft./lit/coat

SHELF LIFE & STORAGE

24 months from the date of manufacture. Shake well before using after prolonged storage

PACKING

1 Liter, 5 Liters, 20 Liters plastic container