

# MELAMINE POLYMER

## (S.M.F Liquid)

### SUPERPLASTICIZER FOR PRECAST CONCRETE

#### DESCRIPTION

MELAMINE POLYMER is an aqueous solution of sulphonated melamine formaldehyde condensate, synthesized by introducing a Sulphonate entity into precondensate oligomer of Melamine (S. Triamino Triazine) and Formaldehyde in a state-of-the-art macromolecule processing plant.

MELAMINE POLYMER is a water-reducing superplasticizer for concrete mixtures, capable of yielding a rheoplastic concrete without segregation of aggregates from cement paste due to maximum surface adsorption of the negatively charged sulphonate group on the hydrating cement particles. It forms a lubricating film, reducing the internal friction of the heterogeneous concrete mixture.

MELAMINE POLYMER is a powerful cement dispersing agent, having water reducing capacity and the ability to produce high flowability, very high early strength as well as an impermeable, durable concrete.

#### TECHNICAL STANDARDS

- Appearance : Clear off-white
- Specific Gravity :  $1.10 \pm 0.02$
- pH value :  $8 \pm 1$
- Solubility : Water soluble

#### STANDARDS

MELAMINE POLYMER meets the requirements as stipulated in IS: 9103-1999 (Superplasticizing admixture for water reduced concrete mixtures, Normal), ASTM C-494 Type F and BS: 5075, Part 3.

#### FEATURES

- Superplasticizes concrete without bleeding - Rheoplastic and self compacting.
- Compatible with ordinary Portland as well as Slag and Fly ash blended cements.
- High water reduction at same workability.
- Low water adsorption.
- Self leveling concrete without efflorescence.
- Significant reduction of internal friction and thixotrophy enabling pouring of concrete into sections around congested reinforcement requiring no vibration to achieve optimum compaction.
- Detrains entrapped air from concrete unlike lignosulphonates and naphthalene sulphonates which disperse entrained air causing loss of concrete strength and durability.
- It can promote and strengthen colour, brighten the colourful surface layer.

## **BENEFITS**

A few of the innumerable benefits of MELAMINE POLYMER

- Earlier removal of formworks/moulds.
- Quicker mould recycles in pre-cast concreting and paving tiles.
- Earlier de-stressing of wire reinforcement in pre-stressed concrete members.
- Cement savings (15 to 20%) per unit volume of concrete.
- Spots-free, smooth finish without holes and gaps.
- Provides high tensile strength.
- Prolongs colour durability of tiles.

## **DOSAGE**

Depending on cement factor, grade of concrete, shapes and fineness of course and fine aggregates, the dosage of MELAMINE POLYMER can vary from 0.4% to 2% by weight of cement.

For Concrete Paving Tiles – 200 gm to 500 gm for 50 kg cementitious material depending on nature of mix, cement content, water-cement ratio etc. The optimum dosage is best determined by laboratory and site trials.

## **MATERIAL SAFETY DATA**

MELAMINE POLYMER is made from chemicals which present no fire or health hazard. However, in case of spillage, washing with water is adequate. Skin contact should be avoided.

## **STORAGE AND SHELF LIFE**

To be stored away from heat and frost. Best before 12 months from the date of manufacture.

## **PACKING**

50 kg and 200 kg HDPE drums. Small and Bulk packing on request.

### **DISCLAIMER**

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