

## MASTERPLAST PL 1

CHLORIDE FREE WATER REDUCING PLASTICIZING ADMIXTURE

### DESCRIPTION

**MASTERPLAST-PL-1** is liquid plasticizing admixture (additive) for cement concrete based on modified lignosulphonates. It reduces the water requirement for concrete mix to attain a given workability. It may be used to reduce cement content of concrete mix without affecting the strength. It is an economical solution of plasticizing concrete. Masterplast -PL-1 disperses the cement particle in the concrete mix & reduces the water content to improve the durability of concrete.

### FEATURES / ADVANTAGES

- It improves workability of concrete
- It provides easier handling and finishing
- Reduces water requirement
- It improves finished appearance of the hardened concrete
- Increases strengths of concrete at all ages
- Reduces shrinkage and permeability
- Has very low chloride content, hence safe for use in prestressed & reinforced concrete

### TYPICAL APPLICATION

- Ready mixed concrete
- Prestressed concrete
- Water reducing agent in concrete

### TYPICAL CHARACTERISTICS

- Nature : Single component, Liquid
- Color : Dark Brownish to yellowish
- pH value : Min 6
- Relative Density at 25<sup>0</sup>C : 1.170 ± 0.02 gm./cc
- Chloride Content : 0.2% max. According to IS 6925
- Air entrainment : Approximately 1% additional air over control concrete mix

### ENGINEERING DATA

Specification complies : IS9103- Water reducing admixture  
EN 934 part 1  
ASTM-C-494, type A & D

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### DIRECTIONS FOR USE

It can be used for all cement types. The required quantity should be added to the gauging water before mixing with the concrete dry mix. The concrete should be mixed at least two minutes after addition of Masterplast -PL-1. The admixture should be added to the concrete mix separately with the mixing water & should not be directly mixed together prior to addition.

### DOSAGE

Normal dosage range is 0.1 to 0.25 liter/ 50 kg of cement. The optimum dosage and compatibility of the admixture with the locally available materials has to be ascertained by proper site trials. As an over dose of Masterplast -PL-1 will give high retardation but ultimate strength will not be reduced. Compatible with all types of Portland cement, including sulphate resisting, compatible with all other admixtures

### CLEANING OF TOOLS AND EQUIPMENTS

Tools and equipment's can be cleaned with water.

### STORAGE AND SHELF LIFE

Store the material in cool and dry place (preferably at 30°C temp). Store under cover, out of direct sunlight and protect from extreme temperatures.

Shelf life is one year from the date of manufacture, when stored in undamaged, unopened, original sealed packaging.

### PACKING

1 ltr, 5 ltr, 20 ltr and 200 ltr

### PRECAUTIONS

- Do not mix it with dry cement.
- Add to mixing (Gauging) water or directly to the mix.
- Stir well before use

### DISCLAIMER

The above information and details herein are based on the tests conducted & experience on application and usage. The user is advised to carry out the test and take trials to satisfy on the suitability of the products and meeting his requirement considering the prevailing conditions prior to apply/ using it on larger area. As the conditions under which the products are used or

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transported are beyond our control. We would not hold ourselves responsible on its consequential non performance.