MASTERPLAST SPL-8

Superplasticiser for Cement Concrete and Mortars

CHOKSEY™

An ISO 9001-2000 Company

DESCRIPTION

Master Plast SPL-8 is a Superplasticiser based on Sulfonated Napthalene Formaldehyde Polymer with high strength properties. It is a liquid plasticizing admixture for cement concrete and mortars. It has a powerful dispersing and deflocculating effect on the particles of cement. It makes the concrete flowable with an added advantage of high early and long term strength. It allows concrete to be easily compacted with minimum vibrations.

FEATURES / ADVANTAGES

- It controls the rate of setting of concrete and mortars.
- It improves workability and easier handling
- It permits the reduction of water to cement ratio.
- It can be used even for micro silica, fly ash and slag cement concrete.
- It retains the workability of concrete.
- It reduces shrinkage and permeability of hardened concrete.
- It increases strength of concrete and mortar due to water reduction property.
- It eliminates formation of cold joints between subsequent pours in mass of structural concrete

USAGE

- It is widely used in ready mix concrete
- Master Plast SPL-8 is particularly recommended for concreting in hot climates, long or difficult pours prestresed concrete in large sections or mass concreting.
- It is used more specifically in Pavement concrete, Pumped concrete, Structural concrete, Bridge decks, highway concrete

TYPICAL PROPERTIES

Color & appearance	: Dark brown low viscous liquid
pH value	: Min 6
Relative density @ 25°C	: 1.200 ± 0.02 gm/cc
Chloride content	: 0.2% Max. As per IS 6925

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SPECIFICATION COMPLIES

Specification complies with:

Indian standard specification	: IS 9103, Superplasticiser Retarding type.
British standard specification	: BS 5075 Part 3
American standard testing materials	: ASTM C-494 Type G

DOSAGE

Normal dosage range of Master Plast SPL 8 is 0.4 to 1.5 % by weight over cementitious materials including PFA, GGBFS and Microsilica/metakaolin. The optimum dosage to meet the specific requirement should always be determined by conducting trial mixes using the materials and conditions that will be experienced in use. Because of variations in job conditions, concrete materials and climatic conditions dosage rates may vary in such cases, contact our CCPL (Construction chemicals) representative.

EFFECTS OF OVERDOSAGE

An overdosing of Master Plast SPL8 can result in the following.

- Delay of initial & final set of concrete.
- Increase in plastic shrinkage.
- Increase in air entrainment.
- Severe bleed& segregation of mix
- Due to slight overdosing of Master Plast SPL8 the ultimate compressive strength of concrete can not be get affected, providing it is properly compacted & cured. Due allowance should be made for the effect of fluid concrete pressure on formwork, & stripping time should be monitored.

DIRECTION FOR USE

- Stirr well the material before use.
- Master Plast SPL8 is ready to use liquid which is dispensed in to the concrete together with the mixing water.
- The dispersion effect is higher if it is added to the damp concrete after 60 to 70% of mixing water has been added.
- Not recommended to add in dry aggregates and cement.

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WORK ABILITY

Master Plast SPL 8 will retain the workability of concrete approx. up to 3 hrs @ 25°C. It retains the workability of concrete in proportion to the amount of product dosage used for trials.. The workability loss is dependent on factors such as temperature, type of cement, type of aggregate, the initial workability of mix and methods of transportation of concrete etc.

It is recommended that concrete should be properly cured by adopting the suitable method of curing.

The use of our curing compounds products Mastercure RB2M & Mastercure WB2M will prevent the early water loss from the surface of the flat works such as pavements in dry, windy and hot climates.

COMPATIBILITY

Compatible with all types of Portland cements, slag & pozzolans such as fly ash, Microsilica/ metakaolin. Master Plast SPL8 is compatible with other water reducing admixtures, air entertainers, retarders, accelerators, corrosion inhibitors when added separately in to the mix.

CORROSIVITY

Master Plast SPL8 has a very low chloride ion content, so it will not promote the corrosion of reinforcing steel embedded in concrete.

PACKAGING

Master Plast SPL8 is supplied in 5, 20,200 liters & 250 kg drums or in bulk as per requirements.

STORAGE & SHELF LIFE

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

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

HEALTH & SAFETY

If it comes in contact with skin, mouth, eyes etc, wash it with plenty of water & if needed take medical advice. If accidentally gets ingested seek immediate medical attention. It is non toxic. Do not reuse the containers for storage of consumable items for further information refer to the material safety data sheet. MSDS available on demand.