MASTERPLAST SPL-9

SUPERPLASTICISER FOR CEMENT CONCRETE AND MORTARS

CHOKSEY™

An ISO 9001-2000 Company

DESCRIPTION

MASTERPLAST SPL-9 is a unique superplasticising admixture for cement concrete and mortar. It retains the workability of concrete for few hours. It enables water requirement to be reduced for a given workability at low dosages. It retains the workability of concrete in proportion to the amount of admixture used. It based on Sulphonated naphthalene formaldehyde polymer. It is more used in situations **where workability retention is needed.** Water reduction upto 40% can be affected.

FEATURES / ADVANTAGES

- It controls the rate of setting of mortar & concrete.
- It permits the reduction of water to cement ratio.
- Due to water reduction it increases not only early and ultimate compressive strength but strength of the concrete at all ages.
- It retains the workability of concrete.
- It gives retardation properties, which helps to avoid cold joints in concrete.
- It allows lowering of cement content without affecting the normal strength of the concrete.
- Non-foaming & non-toxic
- It does not contain Chlorides hence does not corrode the reinforcements.

USAGE

- It is widely used in ready mix concrete.
- MasterPlast SPL-9 is particularly recommended for concreting in hot climates, long or difficult pours, prestresed concrete in large sections or mass concreting.
- It is used in concrete of all classes.
- Recommended for piling & mass concrete.
- Closely spaced areas, large bay areas, floor slabs, roof decks & other structures etc.
- Mainly used in situation where retention properties slump are required.
- It is used more specifically in Pavement concrete, Structural concrete, Bridge decks & Highway concrete, Light weight concrete and Expansive concrete.

TYPICAL PROPERTIES

Colour	: Dark brown low viscous liquid
pH Value	: Min. 6
Relative Density at 25° C	: 1.270 ± 0.02 gm/cc
Chloride Content	: 0.2% Max. as per IS 6925

MASTERPLAST SPL-9

SUPERPLASTICISER FOR CEMENT CONCRETE AND MORTARS

CHOKSEY™

An ISO 9001-2000 Company

SPECIFICATIONS COMPLIES

- Indian Standard specification IS:9103
- British Standard specification BS:5075 Part 3
- American Standard Testing Materials ASTM-C-494 Type G.

DOSAGE

Normal dosage range of Master Plast SPL9 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 SPL9 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 SPL9 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

- Stir well the material before use.
- Master Plast SPL9 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.

MASTERPLAST SPL-9

SUPERPLASTICISER FOR CEMENT CONCRETE AND MORTARS

CHOKSEY™

An ISO 9001-2000 Company

WORKABILITY

- Master Plast SPL9 will retains 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 SPL9 is compatible with other water reducing admixtures, air entertainers, retarders, accelerators, corrosion inhibitors when added separately in to the mix.

CORROSIVITY

- Master Plast SPL9 has very low chloride ion content, so it will not promote the corrosion of reinforcing steel embedded in concrete.

PACKAGING

- Master Plast SPL9 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 refers to the material safety data sheet. MSDS available on demand.