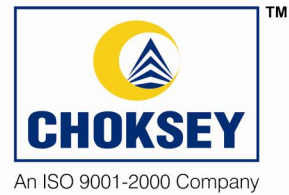


# □ MASTERPLAST SPL - 7

Superplasticiser for Cement Concrete and Mortars



## DESCRIPTION

Master Plast SPL-7 is a unique workability retaining high performance Superplasticiser based on modified Sulphonated Naphthalene Formaldehyde Polymer with high strength properties. It is a liquid plasticizing admixture for cement concrete and mortar. It has a powerful dispersing and deflocculating effect on the particles of cement. It makes the concert flowable with an added advantage of high early and long term strength. It allows concrete to be easily compacted with minimum vibrations. It is used for high volume fly ash concrete mixes also.

## FEATURES / ADVANTAGES

- 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 of all ages.
- It retains the workability of concrete.
- It gives retardation properties, which helps to avoid cold joints in concrete.
- It can be used even for fly ash & slag cement 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

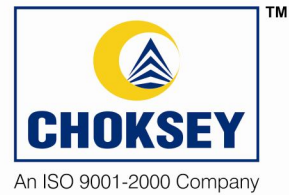
- Ready mix concrete
- Pavement concrete, piling concrete
- High Volume fly ash concrete mixes.
- Pumped concrete, Structural concrete
- Prestressed concrete
- Closely spaced areas, large bay areas, floor slabs, roof decks & other structures etc.
- Mainly used in situation where retention properties slump are required.

## TYPICAL PROPERTIES

- Color & appearance : Dark brown low viscous liquid
- pH value : Min 6
- Relative density @ 25°C : 1.214 ± 0.02 gm/cc
- Chloride content : 0.2% Max. as per IS 6925

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## SPECIFICATION COMPLIESES

- 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 SPL7 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 SPL7 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 SPL7 the ultimate compressive strength of concrete cannot 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

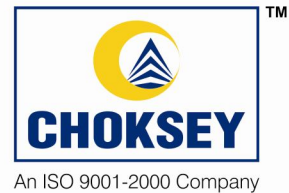
- Stir well the material before use.
- Master Plast SPL7 is ready to use liquid which is dispensed in to the concrete together with the mixing water.
- The dispersion effect is higher if it is added to the damp concrete after 60 to 70% of mixing water has been added.
- Not recommended to add in dry aggregates and cement.

## WORKABILITY

- Master Plast SPL7 will retains the workability of concrete approx. up to 3 hrs @25<sup>0</sup>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.

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- 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 SPL7 is compatible with other water reducing admixtures, air entrainers, retarders, accelerators, corrosion inhibitors when added separately in to the mix.

### CORROSIVITY

- Master Plast SPL7 has very low chloride ion content, so it will not promote the corrosion of reinforcing steel embedded in concrete.

### PACKAGING

- Master Plast SPL7 is supplied in 5, 20,200 liters & 250 kg drums or in tankers 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.

### DISCLAIMER

- The above information and details herein are based on the tests conducted and 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 transported are beyond our control. We would not hold ourselves responsible on its consequential non performance.