



**HIND PLAST SUPER^(TM)
MMF
(Formerly Hind Plast MMF)**

PRODUCT DATA SHEET

SUPER PLASTICIZER CUM HIGH RANGE WATER REDUCING CONCRETE ADMIXTURE

DESCRIPTION

Hind Plast Super^(TM) MMF is a modified polycondensate of melamine and formaldehyde based brown liquid, which gets dispersed immediately in concrete mix together with water. It conforms to **IS: 9103:1999** (Reaffirmed 2004) Edition 2.2 (2007-08) and **ASTM C-494, Type F**.

USES

Hind Plast Super^(TM) MMF can be used to produce an extremely workable **FLOWABLE CONCRETE** without loss of strength or to enable large water reduction to be made for the same workability resulting in dense concrete with higher ultimate strength. This product is quite helpful in producing pumpable concrete, precast concrete, pre-stressed concrete, industrial /commercial flooring with floor toppings and in areas where early shutter stripping are required.

**TABLE-1 Test Results for early Shutter Stripping Usage
Hind Plast Super^(TM) MMF**

Sl. No.	Test	Dosage in Ltr/50K g of Cement	W/C Ratio	Cement content in Kg/m ³	Slump in mm.	Compressive strength in Kg/cm ²			
						1day	3days	7days	28days
1.	Control Mix	Nil	0.55	400	100	82	140	243	342
2.	With Hind Plast Super^(TM) MMF	0.3	0.50	400	115	116	245	340	405

NOTE: The above results are guidelines and as such are suggested in good faith. It is based on test carried out by us in our laboratory using cement, aggregates available locally. Type of cement aggregates from other sources can produce different results. Therefore, it is recommended that site trials are essential to determine optimum suitability for proposed application & dosages.

ADVANTAGES

Substantial improvement in workability and flow properties without increased water, produces self levelling concrete which can be poured into place around densely located reinforcement and requires little (or no) vibration to achieve optimum compaction. The bond strength of concrete to reinforcement steel is considerably increased.

- The internal friction and thixotropy of the mix is reduced to a minimum without the risk of segregation, thus making concrete pumping more efficient.
- Very significant reduction in water minimizes shrinkage cracking thereby producing durable, impervious concrete with a good surface finish. It is suitable for use in all types of concrete above and below ground subjected to water pressure and aggressive atmospheric conditions. Reduction in concrete permeability, protects against water migration and corrosion of reinforcements.
- For a given concrete mix, keeping the cement consumption and workability constant by huge reduction in the amount of mixing water, substantial increase in strength can be achieved. Alternatively, for the same

concrete mix, by keeping the workability and strength constant, a definite cement economy ranging from 15 to 25% can be obtained. Obvious advantages for precast concrete production.

APPLICATION

Hind Plast Super^(TM) MMF is supplied ready for use. For effective dispersion in the mix, measured quantity of **Hind Plast Super^(TM) MMF** should be added into the mix with gauging water. It should not be added to the dry cement.

PROPERTIES

Aspect	Dark Brown liquid
Chloride content	0.2 % (Max)
Specific gravity	1.20 + 0.02 at 27 ⁰ C
pH	≥ 6
Compatibility	Can be used with all types cements including sulphate resistant cement.

SHELF LIFE

12 months from the date of manufacture in unopened condition. Should be stored in a cool and dry place away from direct sunlight.

PACKING

250 Kg. in HDPE container or as required.

HANDLING PRECAUTION

Hind Plast Super^(TM) MMF is non-toxic and ingestion is to be avoided. Any splashes to the skin must be washed with water. If contact with eyes occurs, wash well immediately with water and seek medical advice.

Note:

- Hindcon Chemicals maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
 - The content of the Technical datasheet are for general information and guideline. The result shown here are generated from our laboratory or from our site experiences.
 - Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
 - Since **HINDCON CHEMICALS LIMITED** has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
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