



HIND SUPER FA

PRODUCT DATA SHEET

ULTRAFINE FLY ASH ADDITIVE FOR MORTAR & CONCRETE

DESCRIPTION

Hind Super FA is a ultrafine fly ash additive used for production of high performance concrete. This unique formulation contains alumina-silicates which is highly reactive enables strengthening of cementitious systems and the durability factor is enhanced to larger extent. It confirms to **IS: 3812 Grade 1, ASTM C618 Class F & BS EN 450-S**.

USES

- Used in production of Precast Concrete elements for bridges, tunnels, segmental sections, pre cast units for commercial use.
- Used effectively to produces High Performance Concrete.
- Concrete for Thermal Insulation.
- For faster development of Initial Strength with increased cohesion of Shotcrete mix.
- Industrial Heavy duty Structures.
- SCC (Self Compacting Concrete).
- Can be used as a pumping Aid for high Rise Building/structures.
- Mass Foundation.
- Production of flowable Grouts and Screeds
- Structures confirming to LEED.
- Post Tensioned & Pre-stressed concrete Slabs.

APPLICATION

Hind Super FA is recommended in any concrete application where Portland Cement is used. **Hind Super FA** has an average particle size which is very much below other specification compliant fly ashes which improves the qualities of both fresh and hardened concrete. Adding **Hind Super FA** significantly enhances concrete performance where there is requirement of high strength, durability and controlled heat of hydration.

ADVANTAGES

- Water demand is lesser and when **Hind Super FA** is added to concrete and its helps to reduce shrinkage.
- High performance concrete is achieved at a low water cement ratio.
- The aesthetics and the surface finish of concrete is improved.
- Concrete which can be easily pumped is obtained.
- Economical and permeability resulting to decreased water absorption due to dense paste matrix the durability of the concrete is increased.
- Pozzolanic reaction is continuous which results to extreme and effective hydration process thus giving improved strength with time.

COMPATABILITY

Hind Super FA is compatible with all types of Portland cement and is very much effective when it is used in conjunction with other cementitious material like Flyash and GGBS.

RATE OF ADDITION

Addition rate of **Hind Super FA** is highly depended on the Design strength, method of placing the concrete and the durability factors required. As a general guideline **Hind Super FA** to be added @ **5-15 %** by weight of cementitious content of the mix design. To obtain optimum result adequate curing and good concreting practices to be followed.

PROPERTIES

Aspect	Grey Ultrafine Powder
Relative Density	Ranging between 2.10 -2.30
pH in water	11-12
Surface Area (Sq.cm/Kg) Theoretical	13000
LOI (Loss on Ignition) %	<1.0
Moisture Content %	<0.5
Carbon Content	<0.4
Mean Particle Size	3.8 -5.0
Oxides (Si + Al + Fe)	95% approximately

DURABILITY

Rapid Chloride Permeability Test as per RCPT – ASTM C 1202:2012	735 (Columbs very Low)
Initial Surface Absorption Test as per BS 1881 part -2008 :1996	0.038 ml/m ² .s
Permeability as per DIN 1048 (Part 5) :1991	11-12
Water Absorption Test as per BS 1881 (Part-122) :1983 Amendment 1	3.86 (Average absorption)

SHELF LIFE

The shelf Life of **Hind Super FA** is for indefinite period of time, if stored correctly in a dry place, free from moisture and kept on wooden pallets protected by plastic sheeting as in the case like cement is stored.

PACKING

Available in **25 Kg HDPE Bag**.

HANDLING PRECAUTION

Hind Super FA is non-toxic and inhalation to be avoided. 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.
- The right to change the properties of the products is reserved with us. The proprietary rights of third parties must be observed. All orders are accepted subject to the terms of sale and delivery. Users must always refer to the most recent issue of the latest Data Sheet for the product concerned, copies of which will be supplied on request.

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