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MONOSET-SUPER 6 (POWDER)

PRODUCT INFORMATION

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SET ACCELERATOR & WATERPROOFING SHOTCRETE & GUNITING ADMIXTURE

PRODUCT :

MONOSET-SUPER-6 is an organic base, chloride-free, quick setting waterproofing powder accelerator suitable for guniting or sprayed concrete. It accelerates the rate of hardening, provides high early and final strength, makes the mix more plastic and waterproof. The rebound losses are reduced significantly, thereby the cost of guniting is reduced. The product is hygroscopic, low alkaline in nature and is suitable for low heat, low alkali cement. It is silicate free and does not precipitate with time.

USES :

MONOSET-SUPER-6 is used for shotcrete, sprayed gunite mixes for :

* **Tunnels & Galleries**
* **Underground basements, chambers**
* **Retaining walls, Embankments**
* **Tank Linings, Swimming pools**
* **Concrete repair-work & strengthening buildings.**

ADVANTAGES :

* Fast acceleration makes concrete rock-hard in minutes.
* Provides high early and final strength.
* Rebound losses are minimum.
* Improved bonding properties.
* Contains no chlordies.
* Excellent for overhead guniting.
* Suitable for wet and dry surfaces.
* Speeds up guniting operation, possesses high jetting power and provides thick layers in a single operation — cost saving admixture.
* Provides improved water tightness.

PROPERTIES :

(i) Chloride content : Nil

(ii) Possesses excellent compatibility with O.P.C. Cement (confirming to I.S:269-76) low alkali, low heat, extra fine O.P.C. cement, P.P.C. cement.

(iii) Results of Initial and Final set (Gilmore needle-ASTM C-266) and compressive strength of mortar as per I.S.: 4031 duly modified at water cement ratio of 0.40 and using low alkali, low heat, O.P.C. cement are as under :

MONOSET-SUPER 6 DOSAGE	2.5%	3%	3.5%	4%
Initial Set (minutes-seconds)	2—52	2—00	2—04	1—30
Final Set (minutes-seconds)	4—65	4—30	3—48	3—32
8 Hrs. Compressive strength, kg/cm² (Average Value)	45	52 8	85	85.6

PRECAUTIONS :

(i) While selecting particular dosage of Monoset Super-6, field trials or laboratory tests should be performed, as over dosing may lead to very rapid setting of mix before it reaches sprayed surface and thereby loss of strength occurs. Therefore, operation of spraying of concrete or casting of cubes for strength determination should be performed before initial set occours.

(ii) The accelerator is packed in sacks with two protective envelops so that no moisture of free water gets in or comes in contact as any free water or moisture shall effect the setting time

and strength. Precautions should be taken in storing the product.

(iii) The type and age of cement, temperature are the influencing factors, therefore trial mixes should be prepared with various dosages and correct dosage rate determined.

(iv) Severe water infiltrations must be pre-sealed with Asian Super-2.

METHOD OF USE :

The dosage of Monoset Super 6 ranges from 2.5 to 4% by weight of cement, however, correct required dosage should be selected from the results of setting times and strength. The accelerator is added to properly graded and proportioned concrete/mortar dry mix, fresh cement and dry aggregates/sand are thoroughly mixed in mixing rotar. Water is added only when jetting begins. Preliminary job-site tests with Monoset Super 6 are conducted with optimum dosage in a particular mix and setting times, strength etc. are determined.

For best performance, the surfaces to be treated should be cleaned throughly of all loose material and all dirt, grease, oil, scales and other contaminations. Sand should be uniformly graded and should contain an excess of fines, In case sand is coarse, flyash (from Electrostatic Precipitator) should be added, 30% by weight of cement, to improve plasticity of the mix and decrease the amount of rebound. Sand should contain 3 to 5% moisture for efficient operation of the equipment. Thorough mixing of sand, cement and accelerator is essential. When applying mortar to celing roof, vertical or over hanging surfaces or squaring off corners, the rebound loss averages about 25-30%; for sloping or nearly level surfaces, walls etc. it is close to 15-20%. The amount of rebound loss increases with increased nozzle velocity and the nozzle should be held normal to and about 1 to 1.25 metre from the surface to be coated. The shotcrete mortas should be cured with CUREWELL, membrane forming curing compound for efficient results.

STORAGE :

The product should be stored in dry conditions. It is a non-combustible powder, unaffected by frost. The shelf life is six months when un opened.

PACKINGS :

30 kg sacks with protective envelop.

COMPATIBILITY :

Monoset-Super 6 is compatible with all standard types of low heat, low alkali O.P.C. cements, Rapid hardening Portland Cement, Portland Blast furnace cement, P.P.C. etc. However, its compatibility with some cements is not found, and Monoset Super 10 should be used. Therefore, while ordering Monoset Super 6, it should be clearly indicated whether the cement is P.P.C. OR O P.C., the C_3 A content is high or low (whether more than 8% or less) so that correct material (accelerator) is supplied by us.

PRICE, PERIOD OF DELIVERY AND TERMS OF BUSINESS ON REQUEST.

N. B. — This information is given in good faith, is based on results gained from experiences and tests. However, all recommendations or suggestion are made without guarantee since the conditions of use are beyond our control.

MANUFACTURED BY

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