



RAZON

SUPER GRIND 553 (Cement Grinding Aid & Strength Enhancer)

Super Grind 553 is the next generation grinding aid used to improve the early and final strength of cement & reduce the grinding time of cement to achieve desired fineness. This property can be leveraged to optimise the content of additions in the cement. The cost incurred in the manufacture of cement reduces. It has been formulated to improve the early strength of cements.

Super Grind 553 provides the following Advantages:-

1. Higher Output

- a. Super Grind 553 reduces the grinding time, increasing production output
- b. Decreases Pack Set
- c. Reduces agglomeration of clinker on the grinding media
- d. Improves the efficiency of separators
- e. Lesser stoppages in plant due to plugging of material
- f. Better uniformity of granulometry of cement

2. Cost

- a. Improves per day production cost due to higher output, therefore reduces costs

- b. Saving in energy per ton of cement produced viz. typically in the range of 10-15 %

3. Better Final product

- a. Cement has better dry flow while handling/in silos
- b. Lower particle fraction > 32 micron of the ground cement.
- c. Cement produced has higher early and late strengths
- d. Cement produced has better flexural strengths

Super Grind 553 achieves these properties by neutralizing the surface charges on freshly ground clinker. This inhibits the build up of freshly ground material on the grinding media improving the efficacy. The improvement in efficiency is typically in the range of 10-15%

Thus the cement achieves dry flow, and ease in handling especially in transfer systems and silos. The bagging process is also improved due to easy flowing cement.

The cement manufactured has higher early strengths. This advantage can be leveraged by optimizing the content of additions to the cement without altering the strengths of the final product at all ages.

Dosage& Method of use :- Super Grind 553 is added to the first compartment of the grinding mill on the clinker feeding channel; otherwise it may be sprayed directly on the clinker on the feed conveyor. It is advised that the dosing must be done by an adjustable flow rate dosing pump so that accurate quantities are charged.

The dosage of Super Grind 553 is 0.10% to 0.30% by weight to the total weight of clinker + additions, i.e. 1000 gm to 3000 gm per ton of cement. The dosage may vary depending upon the properties desired, grinding media, process conditions and source of clinker + additions used. It is imperative that Lab & subsequent plant trials be conducted to confirm the dosage.

Lab Trials must be conducted to optimize dosage and results in the final product. A

dosage of 2500 ml per MT may be used as a starting point for strength optimization trials.

Packing:

Super Grind 553 is available in 210 kg barrels. Bulk supply is available on request.

Storage:

It is advisable not to store the product in direct sunlight, if possible. The freeing temperature of Super Grind 553 is below 0⁰C. In case extreme temperatures are encountered, the product may be consumed after thawing and mixing with a mechanical mixer or pressurized air with precaution. It is advisable that no contamination occurs in the product. The product is safe to use in regular working temperatures upto 50⁰C.

| No | PRODUCT DATA | |
|----|--------------|---|
| 1 | Colour | Dark Brown |
| 2 | Specific | 1.10 +/- 2% |
| | pH | 7 - 9 |
| 3 | Packing | 210 kg drums |
| 4 | Storage/life | 6 months to one year when stored in original sealed |
| 5 | Odour | Characteristic Odour. |
| 6 | Compliance | ASTM C465 |

OTHER PRODUCTS

- Admixtures for Ready Mix Concrete/ Precast
- Industrial maintenance products
- Civil Repair Epoxy
- Colour enhancers for coloured concrete
- Protective epoxy coatings
- Concrete surface sealers and repellants
- Anti Efflorescence admixtures for concrete
- Concrete densifiers and coloured coatings
- Waterproofing products
- Admixtures for concrete sleepers, and poles.
- Coatings and systems for aesthetics



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AN ISO 9001:2008 ACCREDITED MANUFACTURER



It is strongly recommended that site trials be conducted using site conditions and available raw materials to evaluate the product. Since site materials and conditions are beyond our control and since above suggestions and recommendations are based on our site trials and laboratory product evaluation & trials, and since methods of use at site are beyond our control. Hence, no guarantee can either be implied or enforceable