

ADMIX AC471

Set Accelerating Admixture for Concrete and Mortar

ADMIX AC471 is a cement set accelerator which is supplied in powder form. This product is used where high early strength or quick setting time is required in concrete or cement slurry. The product may be mixed with ready to used aggregates before spraying in dry shotcrete system. Upon adding water at the nozzle, the accelerator reacts and causes rapid setting.

Applications

ADMIX AC471 can be used where high early strength or thicker layers of sprayed concrete is the aim:

- Temporary or permanent supports in tunneling or underground constructions.
- Rock stabilization in road working and mines.
- Slurry injection in soft grounds.
- Slope stabilization.
- Injection of normal and foamed slurry as back filling in TBM excavation.

Properties

Appearance	White powder
Density	Approx. 0.9 g/cm ³
pH	13 -14
Chloride content	< 0.1% w/w

Applications notes

It is always recommended to use fresh cement; old cements may affect setting properties of concrete. The product is compatible with all types of cement. Use of Portland cement type 2 is recommended as it has faster setting time comparing to others such as Sulphate resistance or Pozzolanic cements. **ADMIX AC471** has good reaction with mixed cements containing fly ash and slags, but trial is advised before batching for determining setting time and 24 hours compressive strength.

Mix design



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In dry shotcrete mix design containing **ADMIX AC471** as accelerator, water cement (total cementitious materials) ratio should be less than 50% or even less than 45%. When high early strength is the aim, water cement ratio of 40% or less should be considered. Lower water cement ratio causes faster setting time, less accelerator consumption and thicker layer applications.

Dosages

Proper dosage can be determined by trials for each project and can't be generalized to other projects. Tested dosage is between 2 to 7 percent of cementitious materials depending of expected setting time, type of cement and water cement ratio.

Packaging

ADMIX AC471 is supplied in 25 kg PP bags.

Storage

This product must be stored in original containers between 5 to 30°C under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage condition contact **White Damavand** Technical Services Department.

Safety awareness

ADMIX AC471 contains alkali materials. Use personal safety devices such as gloves, goggle, mask and safety dresses. In case of any contact with eyes or skin, wash it immediately with water for 15 minutes and get medical helps.

Quality approval

All materials produced in **White Damavand** are under strict control of QC department and meet the requirements of international standards.

Supplementary data

For additional information, please contact company's specialists.



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