

Proset AFP

Alkali-free powder accelerator for dry-mix sprayed concrete



Description

Proset AFP is a non-toxic, alkali-free powder accelerator for dry-mix spraying concrete. Varied dosages of Proset AFP will provide the required setting time.

Applications

Dry-mix sprayed concrete applications such as:

- ▲ Initial and permanent support of surfaces in underground spaces.
- ▲ Slope and rock stabilization.
- ▲ Repair & renovation works..

Advantages

- ▲ Alkali-free, chloride-free and non-toxic.
- ▲ No ground water contaminations from alkali leachates.
- ▲ Improves the bond of shotcrete to rock or concrete.
- ▲ Rapid setting for early strength requirements.
- ▲ Provides improved overhead spraying.

Standards

Proset AFP complies with ASTM C1141/C1141M, Type I, Grade 9, Class B.

Compatibility

Cement:

Proset AFP is recommended to be used in concrete mixes based on Ordinary Portland Cement (OPC) or Rapid Hardening Portland Cement (RHPC). The minimum cement weight per cubic meter of the concrete mix should be no less than 350 kg/m³.

With the assistance of DCP Technical Service preliminary testing can be conducted for Proset AFP compatibility with cements available to the job site.

Admixtures:

Proset AFP is compatible with all DCP admixtures. It is recommended DCP Technical Department should be contacted for advice.

Do not use other set accelerators in the concrete mix.

Technical Properties:

| | |
|------------------------------|------------------------------|
| Colour: | White powder |
| Bulk density: | 800 – 1000 kg/m ³ |
| pH: | 4 ± 1 (1% solution) |
| Chloride content: BS 5075 | < 0.1% |

Method of Use

Dosage

Spraying trials should be conducted to determine the optimum dosage of Proset AFP to meet the performance requirements by using the materials and conditions in actual use.

Dosage of Proset AFP will vary depending on the performance requirements of the spraying concrete, cement type, age and content, temperature of the spraying concrete, substrate and air, the water to binder ratio as well as the other admixtures and materials in the concrete mix.

Typical dosage is between 5% - 10% of binder (cement, PFA, GGBFS, microsilica, etc.) content by weight.

Effects of Over Dosage

Overdosing of Proset AFP will decrease the ultimate concrete strength.

Application

Proset AFP can be added directly to the dry sprayed concrete mix providing that:

- ▲ Moisture content of the mix is less the 6%, and
- ▲ Minimum cement weight per cubic meter of the concrete mix should be no less than 350 kg/m³.

Cleaning

Proset AFP can be washed with fresh cold water.

Proset AFP

Packaging

Proset AFP is available in 15 kg bags.

Storage

Proset AFP has a shelf life of 12 months from date of manufacture if stored in a dry area out of direct sunlight and exposure to frost in original unopened bags at temperatures between 2°C and 50°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

Cautions

Health and Safety

Proset AFP is not classified as hazardous material.

Proset AFP should not come into contact with skin and eyes. Goggles and gloves should be used.

In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

For further information refer to the Material Safety Data Sheet.

Fire

Proset AFP is nonflammable.

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- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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