

Alkali-Free Accelerator for Sprayed Concrete Applications

DESCRIPTION

TamShot 80AF is commonly used for wet mix shotcrete processes in the tunnelling and mining industry. The product is applied where initial rock support is needed or where a permanent lining has been designed (single shell tunnel lining).

TamShot 80AF is a high performance quick setting liquid additive for sprayed concrete applications.

By adjusting the dosage, setting times and rebound can be positively influenced without risking a caustic work environment due to its low alkali content (< 1 %).

KEY BENEFITS

- › Fast setting times and high early strength
- › High final compressive strength development after 28 days and excellent long-term durability.
- › High early strength allows for spraying in thicker layers.
- › Factory controlled quality formula, tailor made for high temperature and high humidity application environments.
- › Very low dust production during application ensures safer working environment.

TYPICAL APPLICATIONS

TamShot 80AF reacts with all commonly used Portland cement types and therefore can be used to accelerate all cement based grouts or concrete types where fast setting of the substrate is required.

Typically, TamShot 80AF is used in the civil and underground construction industry for applications such as:

- › Rock support in tunnels and mines
- › Slope stabilization
- › TBM tunnel linings/backfilling
- › Soil stabilization in poor ground conditions

TECHNICAL DATA

TamShot 80AF	
Colour	Beige
Density	1.425 ± 0.025g/cm ³
Form	Suspension
Chloride Content	< 0.1 %
Alkali Content	< 1 %
pH value	2.5 ± 0.5
Initial Set	< 2 min
Final Set	< 6 min
All at 25°C	

All technical data stated herein is based on tests carried out under laboratory conditions.

APPLICATION GUIDELINES

Refer to our technical department for detailed information on the application of TamShot 80AF.

Note: TamShot 80AF should be added directly at the nozzle of the spraying equipment at a suggested dosage of 3 % to 10% of the cement weight in the concrete mix.

For optimum performance, the w/c ratio should be designed below 0.45. This ensures rapid setting and lower dosages. In most cases, a 6% bwc dosage is suitable for spraying layers of 10cm in a single pass.

In all cases, it is recommended to carry out prior testing involving all components such as cement, fly ash, micro silica, sand, aggregates, etc together with optimizing the workability with TamCem superplasticizing admixtures.

All testing should be aligned to ASTM, EN or EFNARC standards to evaluate the best performing mix-design against economical considerations. Please always involve your local Normet Tunnelling & Mining team for support.

PACKAGING

TamShot 80AF is supplied in IBCs, drums and bulk. Packaging size may vary subject to local regulations and requirements, please contact your local Normet representative for more details.

STORAGE

TamShot 80 AF should be stored at room temperature (min 5°C and max 38°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of 12 months can be expected. However it is recommended that the suspension shall be mechanically agitated after long storage and before use.

Do not mix TamShot 80AF with other accelerator types.

TamShot 80AF must be stored in stainless steel or plastic containers. Storage tanks made of mild (carbon) steel must not be used.

HEALTH & SAFETY

TamShot 80AF should only be used as directed. We always recommend that the Safety data sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.