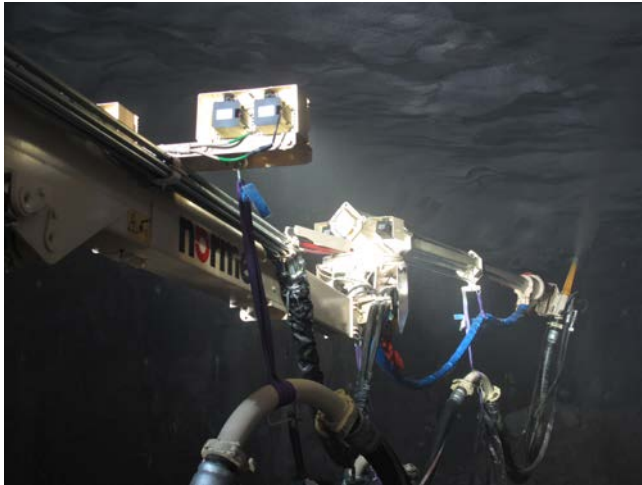


DESCRIPTION



TamShot 210AF is used for wet mix sprayed concrete processes in the tunnelling and mining industry. The product is applied where initial ground support is needed or where a permanent lining has been designed (such as for single shell tunnel lining).

TamShot 210AF is a liquid - clear solution type - high performance set accelerator for sprayed concrete applications. TamShot 210AF has been developed primarily to be used in sprayed concrete mixes containing fly ash based CEM II cement. However, it can also be used with standard CEM I cement types.

By adjusting the dosage, the setting times and rebound can be reduced providing a safe and efficient working environment.

KEY BENEFITS

- > Fast setting times and extremely high early age strength gain allows for spraying in thicker layers.
- > Very fast compressive strength development the first hours after setting.
- > High final compressive strength development after 28 days and excellent long-term durability.
- > Assured performance also at low temperatures and onto wet substrate conditions.
- > Very low dust production during application ensures a safer working environment.

TYPICAL APPLICATIONS

TamShot 210AF reacts with all commonly used Portland cement types and therefore can be used to accelerate all cement based grouts or concrete where fast setting is required.

TECHNICAL DATA

TamShot 210AF meets the requirements of EN 934-5 "Admixtures for sprayed concrete", ASTM C1141/C1141M "Standards Specifications for Admixtures for Shotcrete", and EFNARC "European Specification for Sprayed Concrete".

TamShot 210AF			
Physical property	Unit	Value	Test method
Form	--	Clear/hazy solution	Visual
Colour	--	Yellowish	Visual
Density	kg/m ³	1350 ± 30	ISO 758
Solids content	% by mass	40.0 ± 2.0	EN 480-8
pH	--	3.5 ± 0.5	ISO 4316
Viscosity (20°C)	mPa·s	≤ 50	Brookfield LV4, 100 rpm
Alkali content	% by mass	≤ 1.0	EN 480-12
Chloride content	% by mass	≤ 0.10	EN 480-10

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

APPLICATION GUIDELINES

Refer to your local Normet representative for detailed information on the application of TamShot 210AF.

Note: TamShot 210AF 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 % (w/w of cement) dosage is suitable for spraying layers of 10 cm in a single pass.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

PACKAGING

TamShot 210AF is supplied in IBCs and bulk containers. Other packaging sizes can be agreed with your local Normet representative.

STORAGE

TamShot 210AF 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 six months can be expected.

TamShot 210AF must be stored in stainless steel or plastic containers. Do not store the product in containers made of mild (carbon) steel.

After prolonged storage it is recommended to gently agitate TamShot 210AF prior to use. This can be done either by stirring or by pumping (recirculation).

Do not mix TamShot 210AF with other accelerator types.

HEALTH & SAFETY

TamShot 210AF 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 SDS is available upon request from your local Normet representative.