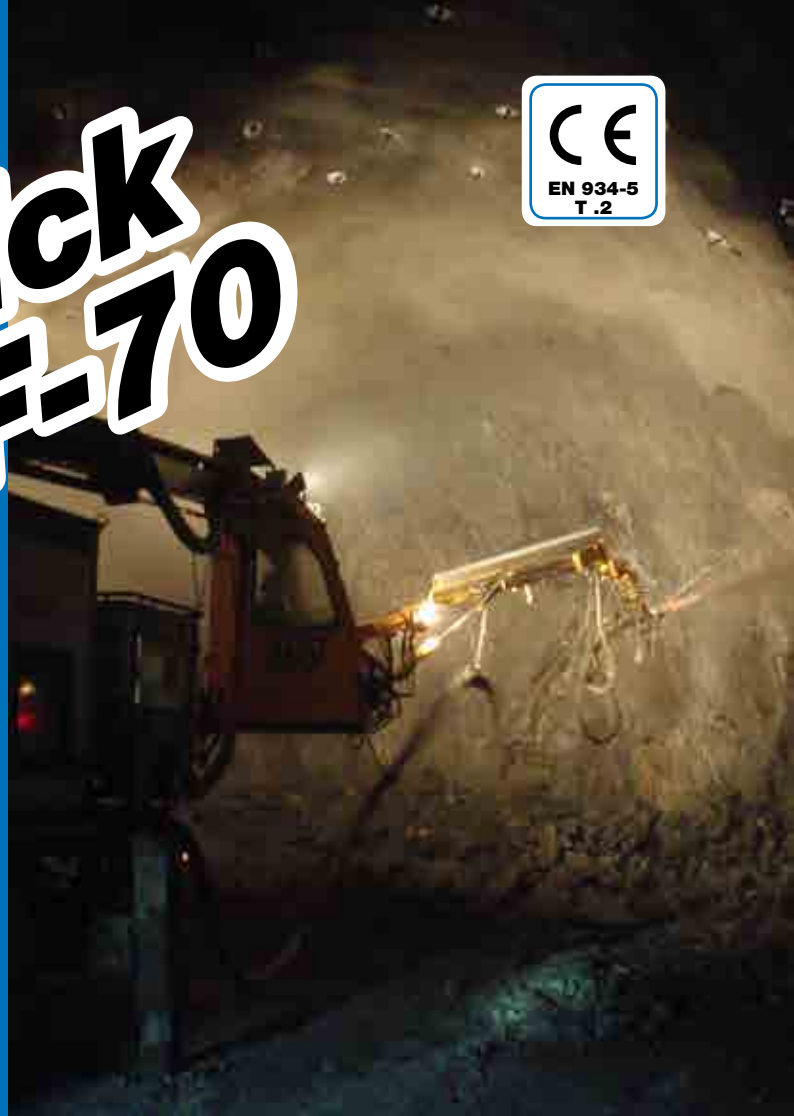


Mapequick AF-70

Alkali-free accelerator for sprayed concrete



DESCRIPTION

Mapequick AF-70 is a liquid alkali-free accelerator, with which it is possible to produce shotcrete characterised by rapid setting times and a very quick development of its strength after only a very short curing time.

AREA OF USE

Mapequick AF-70 is a stable suspension to be used to accelerate sprayed concrete. The accelerator provides high strength after 60 min. and uniform strength development in 24 hours.

Mapequick AF-70 does not provide reduced final strength, compared to a basis concrete.

Some application examples:

- securing surfaces during operations in tunnels;
- sprayed concrete for structural tunnel repairs;
- sprayed concrete applications with high mechanical performances;
- shotcrete applications with high mechanical strength (≥ 40 N/mm²) for the final tunnel lining;
- consolidation of rock and cliff-faces.

TECHNICAL CHARACTERISTICS

Mapequick AF-70 is a water solution of aluminium complexes to be added at the nozzle during the spraying phase, prepared according to a formulation developed in the MAPEI research laboratories. The acceleration of the setting time and the development of mechanical performance vary according to the dosage of the admixture, the type and amount of cement, its ageing and the water-binder ratio used. The temperature of the shotcrete influences the rate of setting and early strength.

RECOMMENDATIONS

Do not use **Mapequick AF-70** with ordinary concrete. **Mapequick AF-70** cannot not be mixed with other setting accelerators. When using another type of accelerator, it is necessary to thoroughly clean the dosage equipment with water before use.

Do not add directly **Mapequick AF-70** into the cement mixer!

LABORATORY TESTING

Our Laboratory is available for evaluating the compatibility and dosage of **Mapequick AF-70** with cements used on job-sites. To make the best use of **Mapequick AF-70**, please contact the "Underground Technology Team" technical service to verify and perfect the characteristics of the concrete used, according to local application conditions.

COMPATIBILITY WITH OTHER PRODUCTS

Mapequick AF-70 is compatible with all the superplasticizers the **Dynamon** System and the **Mapefluid** range.

Mapequick AF-70 is compatible with our stabilizers agents, such as **Mapetard D** and **Mapetard SD-2000**.

CONSUMPTION

Dosage in weight: from 3-10 kg pr 100 kg cement.

PACKAGING

Mapequick AF-70 is available in 1000 liter IBC-containers and bulk.

TECHNICAL DATA (typical values)

PRODUCT DESCRIPTION

Appearance:	brownish liquid
Density (ISO 758) (g/cm ³):	1.43 ± 0.03 at + 20 °C
pH (ISO 4316):	3 ± 1
Principal action:	acceleration of setting time
Alkali equivalent (Na ₂ O) (EN 480/12) (%):	≤ 1
Chlorides (EN 480/10) (%):	≤ 0.1

STORAGE

Mapequick AF-70 should be stored in closed containers at a temperature between +5°C and +30°C, protected from frost and direct sunlight. If the product has been stocked for a long period, it is suggested to shake and homogenize it by using mechanised stirrer and/or recirculation pumps. It is strongly recommended not to shake the product by means of compressed air.

Please contact our technical service Underground Technology Team if the product is used after its expiring date (3 months) or after freezing. Even if the product is exposed to long elevated storage temperature or to rapid temperature changing, it does not change its characteristic which remains the same, it can only assume a different colour.

SAFETY INSTRUCTIONS FOR PREPARATION AND USE

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no.

PRODUCT FOR PROFESSIONAL USE.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an

indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.no

LEGAL NOTICE:

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.no.

ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES

All relevant references for the product are available upon request and from www.mapei.no



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