

Ekan® SHOT 90 AL

Liquid additive for shotcrete (sprayed concrete)



Ready-Mix Concrete Admixtures
Sprayed concrete admixtures



EN 934-5 T.2

CHARACTERISTICS

EKAN® SHOT 90 AL is a high-performance alkaline liquid accelerating additive for sprayed concrete, developed for both wet and dry-mix shotcrete applications. The product is formulated to ensure very rapid setting times and fast development of initial and final mechanical strength, improving the efficiency of site operations.

Thanks to its sodium aluminate-based formulation, **EKAN® SHOT 90 AL** ensures high performance in shotcrete applications, even in difficult environmental conditions. The dosage can be adapted according to application requirements, climatic conditions, and the characteristics of the mix, allowing for optimal setting and hardening performance.

Benefits

EKAN® SHOT 90 AL offers numerous advantages in sprayed concrete applications:

- Rapid development of initial mechanical strength.
- Reduction of rebound during shotcrete application.
- Improved adhesion of sprayed concrete to rock and concrete surfaces.
- Greater efficiency in overhead applications and tunnel work.
- Reduction in construction times thanks to the fast setting of the material.
- Does not contain chlorides or substances that could promote corrosion phenomena.
- Consistent performance even in different climatic and environmental conditions.

Compatibility

EKAN® SHOT 90 AL is compatible with cements complying with the UNI EN 197 standard and can be used together with superplasticizers, viscosity modifying agents, and specific additives for shotcrete. Compatibility with other additives must be verified through preliminary tests.

INSTRUCTIONS FOR USE

Areas of use

- Gallery and tunnel applications.
- Rock and slope stabilization.
- Sprayed concrete linings.
- Mining applications.
- Consolidation and structural repair interventions.

Application

The dosage of EKAN® SHOT 90 AL depends on the characteristics of the concrete, the type and quantity of binder used,

environmental conditions, and the required performance. Generally, the recommended dosage is between 3% and 10% by weight of the binder.

The setting speed and the development of mechanical strength also depend on the water/cement ratio, the temperature of the concrete, and the type of cement used. Lower temperatures may require higher dosages of accelerator.

It is recommended to always carry out preliminary laboratory and industrial tests to define the optimal dosage based on the specific conditions of use.

TECHNICAL DATA

Appearance: Liquid

Color: Reddish / yellowish

Density: 1.46 ± 0.03 kg/L

pH: 12 ± 1.5 (20°C)

CERTIFICATIONS



14001 : 2015



45001 : 2018



9001 : 2015



EN 934-2

PRECAUTIONS

The shelf life of EKAN® SHOT 90 AL is 12 months when stored in its original packaging in a dry environment protected from direct sunlight.

After a long period of inactivity, shake, stir the product, or use a circulation pump to homogenize it before use.

After a freeze/thaw cycle, stir the product before use.

Avoid contact with eyes and skin. For complete information regarding the handling, safety, storage, and disposal of the product, consult the updated Safety Data Sheet.