

INGUNIT P

*Admixture for sprayed concrete and mortar, alkali-free powdery accelerator of setting
In compliance with: EN 934-5:T2*

FIELD OF APPLICATION

Production of sprayed concrete - *Shotcrete* using "Dry" application method, for improving the application and quality of shotcrete and mortars for tunnel construction, ground stabilization of slopes, and for reparation of reinforced-concrete constructions.

Suitable for repair of concrete elements with curved and irregular forms such as domes, hyperbolic vaults and the like.

Used as admixture - Set accelerator for preparation of contact bond grouting in tunnels, revision galleries at dams, for sealing active penetrations of water and the like.

In smaller dosages it can be used in the production of prefabricated concrete elements in order to enable faster release of the molds and increase the productivity of the production process.

PROPERTIES

- Intensive acceleration of setting time of concrete and mortar
- Achievement early strength characteristics
- Improves adhesiveness of concrete and mortar mixture
- Enables mechanical placement of shotcrete on vertical, inclined and ceiling surfaces
- Reduces the rebound – waste of material during spraying
- Low content of alkali
- Does not contain chlorides

TECHNICAL FEATURES

Type:	Alkali Free base
Appearance:	Light gray powdery mass
Alkali content:	<1,0%
Chlorides content:	≤0.1%

DOSAGE AND PERFORMANCE:

For sprayed concrete the dosage is 3% to 7% by weight, in relation to cement mass. The dosage percent depends on the acceleration time which has to be achieved, from the consistency of the concrete, type and quantity of cement, temperature conditions, substrate category upon which it is applied etc. If used for sprayed concrete in concreting primary tunnel lining, then dosing for concreting the calotte part should amount 5% to 7%.

Ingunit P is added to the dry concrete mixture immediately prior to concrete placement.

When used as an accelerator for classical concretes and mortars, Ingunit P is added (recommended up to 2%) immediately prior to concrete placement, directly into the mixture. Mixing and placement are carried out fast, because there is a danger of quick setting and damaging the equipment.

COMPATIBILITY

Ingunit P is compatible with a number of admixtures of ADING's production program. If there are two or more admixtures in the concrete mixture it is necessary to perform preliminary tests. Different admixtures are batched separately - they are not intermixed with each other prior to insertion into the concrete mixture.

EFFECT DUE TO OVERDOSING

With incorrect estimate of Ingunit P dosage, concrete may set too fast and to cause damage to the equipment.

PACKAGING

Bags: 25kg

STORAGE

In the original packaging, under dry conditions and protected against direct exposure of sunlight, at temperature between 5°C and 35°C. Shelf life: 12 months.

CE 2032	
ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 21 GAGB001/1 EN 934-5:2007 INGUNIT P Non-alkaline set accelerating admixture for sprayed concrete EN 934-5:T2	
Chloride ion content	≤ 0,1% by mass
Alkali content	≤ 1,0% by mass
Corrosion behaviour	Contains components only from EN 934-1:2008, Annex A.1
Compressive strength	At 28 days: test mix ≥ 90 % of control mix At 90 days: test mix ≥ test mix at 28 days
Setting time	Initial setting time ≤ 10 min Final setting time ≤ 60 min
Dangerous substances	No performance determined

Health hazard: When handling Ingunit-P it is obligatory to use personal protection equipment - protective glasses, protective gloves, respiratory mask. Space where Ingunit-P is used must be properly ventilated. Additional informations are provided in Material Safety Data Sheet for the product.

Fire: Ingunit-P is a non-flammable powder. Additional formations are provided in Material Safety Data Sheet for the material.

Cleaning and deposit: Old and used packaging must be disposed according to local regulations for that type of waste. Additional formations are provided in Material Safety Data Sheet for the material.