

## PRODUCT DATA SHEET

# Sika® Sigunit®-1402 AFL

Alkali free shotcrete accelerator – Admixture

### DESCRIPTION

Sika® Sigunit®-1402 AFL is a highly effective alkali free accelerator for shotcrete in liquid form.

### USES

Sika® Sigunit®-1402 AFL is an accelerator suitable for dry as well as wet spray applications. It is used for the following main applications :

- Securing of rock in tunnel construction
- Rock and slope stabilization
- High quality shotcrete for general construction work
- Acceleration of cementitious grouts, such as used in TBM Tunnel linings cement ground injections and back filling

### CHARACTERISTICS / ADVANTAGES

Following arguments specially distinguish Sika® Sigunit®-1402 AFL as catalyser of spraying concrete:

- Free from alkali
- Good long term strength and durability
- In case of proper application, minimum loss of solidity of the catalysed concrete
- Reduction of rebound
- Improved adhesion of the sprayed concrete on rock and concrete
- Improved adhesion in the overhead crown portion
- Clear reduction of dust and a good working environment
- Free from chloride and does not attack reinforcement

### APPROVALS / STANDARDS

ASTM C 1141 Type II Grade 9

### PRODUCT INFORMATION

Chemical base	Minerals
Packaging	250 kg HDPE drum
Shelf life	6 months from date of production if stored in undamaged and unopened, original sealed containers.
Storage conditions	Sika® Sigunit®-1402 AFL must be stored in its original container as supplied, protect from direct sunlight and frost, store at temperatures between +5°C and +35°C. Opened containers must be used as quickly as possible. It is recommended always stir well Sika® Sigunit®-1402 AFL before use as with prolonged storage it can have a certain settlement as it is suspension type material
Appearance / Colour	White to Beige colour liquid
Density	~1.31 at 25°C
pH-value	~2.7

# APPLICATION INFORMATION

<b>Recommended Dosage</b>	The most effective dosage must be determined by site trials. Dosage rate will vary according to w/c ratio, materials used, ambient conditions, shotcrete method used and the requirements of a specific project. For general applications sika recommends a dosage between 3-10% by weight of the total cementitious content. The effect of Sika® Sigunit®-1402 AFL depends on cement type, cement age, reactivity of cement, cement content and type of subgrade.
<b>Dispensing</b>	Sika® Sigunit®-1402 AFL is dosed and added on-site by a liquid dispensing system. Optimum dispersion in the shotcrete is governed by nozzle configuration and shotcreting techniques.
<b>Compatibility</b>	Sika® Sigunit®-1402 AFL is compatible with Sika's water reducers, Superplasticizers etc.

## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## IMPORTANT CONSIDERATIONS

Accelerator hoses must be thoroughly cleaned before using Sika® Sigunit®-1402 AFL. Metal parts of the pump coming into direct contact with Sika® Sigunit®-1402 AFL must be made from stainless steel. Stir well before use.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## MAINTENANCE

### CLEANING

Clean all tools and application equipment with water immediately after use.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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