

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika<sup>®</sup> Sigunit<sup>®</sup> L-93 AF (I)

# ALKALI FREE LIQUID ACCELERATOR SHOTCRETE ADMIXTURE

#### DESCRIPTION

Sika® Sigunit® L-93 AF (I) is a highly effective alkali free accelerator for shotcrete in liquid form.

#### USES

Sika® Sigunit® L-93 AF (I) 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

# **CHARACTERISTICS / ADVANTAGES**

Sika<sup>®</sup> Sigunit<sup>®</sup> L-93 AF (I) produces high quality shotcrete. It has following advantages:

- Free from alkali (non-caustic), non toxic product
- 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 over head 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 I,II Grade 9 Class A.

Chemical Base	Mixture of special organic substances
Packaging	300 Kg HDPE drum
Appearance / Colour	Beige white coloured suspension type liquid
Shelf Life	6 months from date of production if stored in undamaged and unopened, original sealed containers.
Storage Conditions	Store in dry condition, protected from direct sunlight and frost, at temper- atures between +5°C and +35°C. Opened containers must be used as quickly as possible. It is recommended always stir well Sika <sup>®</sup> Sigunit <sup>®</sup> L-93 AF (I) before use.
Density	~1.46 Kg/l at 25ºC
pH-Value	1.5 - 3.5 at 25ºC
Total Chloride Ion Content	No added chlorides

# **PRODUCT INFORMATION**

Product Data Sheet Sika® Sigunit® L-93 AF (I) December 2018, Version 01.01 021401011000000141 Compatibility

Sika<sup>®</sup> Sigunit<sup>®</sup> L-93 AF (I) is compatible with all types of cements and cementitious materials. It is also compatible with many Sika<sup>®</sup> products.

#### **APPLICATION INFORMATION**

**Recommended Dosage** 

In general a dosage of 3 - 10% is by weight of cementitious content. The most effective dosage must be determined by site trials.

### **APPLICATION INSTRUCTIONS**

#### DISPENSING

- Sika<sup>®</sup> Sigunit<sup>®</sup> L-93 AF (I) is metered and added using a liquid dispensing system
- Optimum dispersion in the shotcrete is governed by nozzle configuration and shotcreting techniques

### LIMITATIONS

- The Sika® Sigunit® L-93 AF (I)'s effect depends on cement content, age, type and substrate.
- It is also dependent on the temperature of the shotcrete and the application area, and shotcrete methods used.
- the performance of Sika<sup>®</sup> Sigunit<sup>®</sup> L-93 AF (I) also significantly depends on, in the wet spray process, the w/c ratio of the basic concrete mix, and in the dry process, the amount of water added during spraying.
- Metal components that come into direct contact with the product should be fabricated of stainless steel. Do not use brass part.

# **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.

# LOCAL RESTRICTIONS

#### 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 safetyrelated data.

# 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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