**Sika® Sigunit® L-72 AF**

**Liquid Alkali-Free Shotcrete Accelerator**

**Description**
Sika® Sigunit® L-72 AF is a high performance, alkali-free liquid set accelerator for shotcrete applications.

**Where to Use**
Sika® Sigunit® L-72 AF is suitable for both dry and wet spraying processes and it is used for:
- Support at the face while advancing tunnels and mines.
- Rock and slope stabilization.
- High quality lining shotcrete.

**Advantages**
- High early strength development.
- Alkali- and chloride-free.
- No pollution of groundwater by leaching of alkalis.
- Distinct reduction in rebound.
- Improves bond of shotcrete to rock and concrete thus facilitating overhead spraying.
- Distinct reduction of dust.

**Typical Data**

<table>
<thead>
<tr>
<th>Packaging</th>
<th>208 L (55 US gal.) drum</th>
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<tbody>
<tr>
<td></td>
<td>1040 L (275 US gal.) IBC container</td>
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<tr>
<td>Colour and Form</td>
<td>Translucent to white liquid</td>
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<tr>
<td>Shelf Life and Storage</td>
<td>6 months when stored in unopened original containers, protected from direct sunlight and frost and kept at temperatures between 10 - 30°C (50 - 86°F). Store in stainless steel or plastic container as the low pH of the admixture may cause corrosion if stored in normal steel container, which might affect the performance of the admixture. Protect from direct sunlight, heat and frost. If these conditions are unattainable, Sika® Sigunit® L-72 AF may precipitate. If this occurs, the performance of Sika® Sigunit® L-72 AF may be adversely affected and your Sika Canada Technical Sales Representative should be contacted.</td>
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**Properties**

| Specific Gravity | Approx. 1.4 |

**How to Use**

**Dosage**
The most effective dosage must be determined by trial. Dosage rates will vary according to water/cement ratio, materials used, ambient conditions, shotcrete methods used and the requirements of a specific project. For general applications Sika recommends a dosage between 4 - 8% by weight of the total cementitious content. The performance of the Sika® Sigunit® L-72 AF will vary according to water/cement ratio of the mix. Dosage rates outside the recommended range may be used where specialized materials such as microsilica are specified, extreme ambient conditions are encountered or unusual project conditions require special consideration. In this case, please contact your Sika Canada Technical Sales Representative. The effect of Sika® Sigunit® L-72 AF depends on cement type, cement age, cement content and type of subgrade.

**Mixing**
Sika® Sigunit® L-72 AF dosed and added on-site by a liquid dispensing system. Optimum dispersion in the shotcrete is governed by nozzle configuration and shotcreting techniques.

**Important information:** The concrete temperature should not be lower than 15°C (59°F) when shotcreting in thick layers - 100 mm (4 in) and above.

Use of Sika® Sigunit® L-72 AF requires the technically correct installation of dosing and conveying equipment. Metal components that come into direct contact with the product should be fabricated of stainless steel. Do not use brass parts.

**Combination with other Sika admixtures:** Sika® Sigunit® L-72 AF is compatible with Sika’s water reducing, high range water reducing, hydration control admixtures and other admixtures. Trials with local materials is always recommended to verify performance.
Construction
Concrete Admixtures / Shotcrete
Sika® Sigunit® L-72 AF

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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.

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Application
A typical concrete mix to be sprayed is detailed below:

- 8 - 16 mm (1/3 - 2/3 in) aggregates
- SikaTard® 930 set control admixture
- Sika® Viscocrete® 2100 superplasticizer admixture
- Sikacrete® 950 DP silica fume

Concrete temperatures should not be lower than 15°C (59°F) (especially in cases of thick shotcrete layers). Lower temperatures will require higher dosages.

Clean Up
Use personal protective equipment (chemical resistant goggles/gloves/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

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

KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY