

PRODUCT DATA SHEET

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Sika® Sigunit® L-50 AF

LIQUID ALKALI-FREE SHOTCRETE ACCELERATOR

Description	Sika® Sigunit® L-50 AF is a high-performance, liquid, alkali-free accelerator for wet or dry shotcrete.
Where to Use	<ul style="list-style-type: none"> High quality and high initial strength shotcrete for general construction work Support at the face and securing of rock in tunnel and mine construction Rock and slope stabilisation along highways and transportation routes
Advantages	<ul style="list-style-type: none"> Alkali-free, avoiding additional leaching and pollution of alkalis and pollution of ground and surface water When correctly used, marginal reduction of shotcrete strength Reduction of rebound Easier overhead spraying by improved bond of shotcrete to rock and concrete Reduction of dust formation Chloride-free, suitable for steel reinforced shotcrete and substrates
Technical Data	
Packaging	1040 L IBC Bulk delivery
Colour	Off White
Shelf Life and Storage	At least three (3) months when stored in unopened, undamaged container in dry conditions, protected from sun and weather. Store at temperatures between 5 and 35 °C (41 and 95 °F).
Application Temperatures	Concrete temperatures should not be lower than 15 °C (59 °F) (especially in cases of thick shotcrete layers). Lower temperatures will require higher dosages.
Properties at 23 °C (73 °F) and 50 % R.H.	
Dry matter content in solution	45 %
Density (of solution)	1.36 kg/L
Chloride Content	No added chlorides
Water soluble chloride (Cl), weight - %	< 0.15
<i>Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.</i>	

HOW TO USE

Dosage The exact dosage must be determined by preliminary testing. The dosage of Sika® Sigunit® L-50 AF, should be between 5 - 10 % by weight of the cement. Lower temperatures will require higher dosages.

The set accelerating effect of Sigunit® L-50 AF 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 the Sigunit® L-50 AF also significantly depends upon the w/c ratio of the basic concrete mix, in the wet spray process, and the amount of water added during spraying, in the dry spray process.

Application A typical concrete mix to be sprayed contains:

- Sika® Stabilizer viscosity modifying admixtures
- SikaTard® set control admixtures
- Sika® Viscocrete® superplasticizer admixtures
- Sikacrete® silica fume or SikaTell® colloidal silica suspension
- Sika® FerroGard® corrosion inhibiting admixtures

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Clean Up Rebound and other shotcrete waste accelerated with Sika® Sigunit® L-50 AF can be disposed of in the same way as non-accelerated shotcrete waste. Neat accelerator must be disposed of as special waste according to local regulations.

Limitations

- The conveyance hose for the accelerator must be thoroughly cleaned before using Sika® Sigunit® L-50 AF.
- Metal parts of the dosage equipment and/or pump coming into direct contact with Sika® Sigunit® L-50 AF must be of stainless steel.
- The use of Sika® Sigunit® L-50 AF requires skilled and technically correct installation of dosing and conveying equipment. Please consult your Sika Canada Technical Sales Representative for further information.

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 SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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 shelflife. 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 information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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