



PRODUCT DATA SHEET

Sika® Sigunit® L-500 AFI

LIQUID ALKALI-FREE SHOTCRETE ACCELERATOR

PRODUCT DESCRIPTION

Sika® Sigunit® L-500 AFI is a high-performance, liquid, alkali-free accelerator for wet or dry shotcrete.

WHERE TO USE

- 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 stabilization along highways and transportation routes.

CHARACTERISTICS / ADVANTAGES

- 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.

PRODUCT INFORMATION

Packaging	1040 L IBC Bulk Delivery
Shelf Life	Four (4) months when stored in unopened, undamaged container in dry conditions, protected from sun and weather.
Storage Conditions	Store at temperatures between 10 and 35 °C (50 and 95 °F).
Appearance / Colour	Off White
Density	Density of solution 1.36 kg/L
Conventional Dry Material Content	The dry matter content in solution is 45%
Total Chloride Ion Content	No added chlorides. Water soluble chloride (Cl), weight-% < 0.15

TECHNICAL INFORMATION

Specific Advice	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.
------------------------	--

Concrete Substrate

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

APPLICATION INFORMATION

Recommended Dosage

The exact dosage must be determined by preliminary testing. The dosage of Sika® Sigunit® L-500 AFI, should be between 4 and 8 % based on cementitious content. Lower temperatures will require higher dosages. The set accelerating effect of Sika® Sigunit® L-500 AFI 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 Sika® Sigunit® L-500 AFI also significantly depends upon the w/c ratio of the shotcrete mix, in the wet spray process, and the amount of water added during spraying, in the dry spray process.

BASIS OF PRODUCT DATA

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.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

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 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

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

Product Data Sheet

Sika® Sigunit® L-500 AFI
March 2022, Version 02.01
021401011000000258

SikaSigunitL-500AFI-en-CA-(03-2022)-2-1.pdf

