



## PRODUCT DATA SHEET

# Sika® Stabilizer-510 MBF Liquid Concentrate

### HIGH-RANGE WATER REDUCING ADMIXTURE FOR MINE BACKFILL

#### PRODUCT DESCRIPTION

Sika® Stabilizer-510 MBF Liquid Concentrate is a high-range water reducing admixture used by the mining industry to improve the performance of cemented paste fill in underground backfill operations. The product is well suited for a range of gold deposits (orogenic, quartz lode hosted gold) as well as polymetallic base metals deposits (volcanogenic massive sulfide).

#### WHERE TO USE

Sika® Stabilizer-510 MBF Liquid Concentrate can be used to:

- Reduce water and increase solid content of the cemented paste fill
- Improve the rheological properties to facilitate mixing and pumping, and increase backfill throughput

- Reduce pumping- and line pressure
- Reduce the risk of blockages
- Improve in-situ compressive strengths at the final stage
- Optimize paste fill cost by reducing binder content (cement, slag, fly ash)
- Reduce wear and tear of machinery, equipment and paste lines
- Reduce segregation and bleeding of the placed paste fill
- Reduce shrinkage and permeability in hardened fill

#### CHARACTERISTICS / ADVANTAGES

- Reduction of the cement content up to 25 % and associated CO<sub>2</sub> emission
- Strong water reduction of the paste mix
- Ideal for remote projects
- Can be stored in cold temperatures
- Limit transport costs: no fillers or excess water to transport

#### PRODUCT INFORMATION

Packaging	1040L IBC
Shelf Life	9 months from date of production if stored in unopened and undamaged original sealed container.
Storage Conditions	Storage temperature should be lower than 35 °C
Appearance / Colour	Dark brown liquid
Density	1.2 kg/L once product is diluted
Viscosity	at 23 °C : 20 cPs

## APPLICATION INFORMATION

### Recommended Dosage

The dosage to be used should be estimated by preliminary laboratory testing. The recommended dosage based on the solid phase is between 0.80 and 1.50 kg per 100 kg of cement. It is suggested to use an automated liquid admixture dispensing system adapted to the paste backfill mixing method used on site. Start plant trials with a lower dosage than the one estimated in the laboratory. If the performance and the system results are satisfactory, continue with this dosage. If performance is unsatisfactory, gradually increase the dosage while continuously monitoring the system until the desired performance is achieved. Do not use a higher dosage than the one estimated by preliminary laboratory testing without further testing.

## 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.

## APPLICATION INSTRUCTIONS

Dissolution of the admixture : Mechanically mix a 1040 L tote of Sika® Stabilizer-510 MBF Liquid Concentrate with 1820 L of water for a minimum of 10 minutes or until a homogeneous mix is obtained. Other dilution ratios may be necessary depending on the capacity of the on-site dispensing equipment. Once the mixture has been mixed, it can be transferred to the storage tank and dosed by a liquid dispenser.

## 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](http://www.sika.ca)

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### Other locations

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

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