



PRODUCT DATA SHEET

Sika® Stabilizer-5012 TBM CA

High range water reducing admixture for cement / bentonite injection grouts

PRODUCT DESCRIPTION

Sika® Stabilizer-5012 TBM CA is a high range water reducing and super plasticizing admixture for cement or cement / bentonite injection grouts, utilizing Sika's polycarboxylate polymer technology.

WHERE TO USE

- Sika® Stabilizer-5012 TBM CA is commonly used in backfilling operations during tunnel excavation with shielded tunnel boring machines (TBMs).
- The superplasticizing effects of the Sika® Stabilizer-5012 TBM CA allow for the cement or cement / bentonite injection grout to have the required flow and pumping characteristics for each project's unique operations.
- Sika® Stabilizer-5012 TBM CA is supplied in liquid form and is added into the cement grout during the mixing process.

CHARACTERISTICS / ADVANTAGES

Water Reduction:

Sika® Stabilizer-5012 TBM CA is suitable for all levels of water reduction.

High Plasticity:

The superplasticizing action of Sika® Stabilizer-5012 TBM CA provides a flowing grout that maintains excellent fluidity and open time. Sika® Stabilizer-5012 TBM CA plasticized grout is highly fluid while maintaining excellent cohesion within the cementitious matrix to eliminate excessive bleeding or segregation.

Extended Slump Life and Set Control:

Sika® Stabilizer-5012 TBM CA has been formulated to provide controlled and predictable extended flow retention times of cementitious grouts, even at low dosages.

APPROVALS / CERTIFICATES

- ASTM C494 Types A and F
- AASHTO M194 Type A and F

PRODUCT INFORMATION

Packaging	1040 L (275 US gal.) IBC Bulk delivery
Colour	Liquid/light blue
Shelf Life	1 year when stored in dry warehouse conditions, at temperatures between 10 °C and 27 °C (50 °F and 80 °F).
Storage Conditions	Store in dry conditions, ideally at temperatures above 10 °C (50 °F). If frozen, thaw and agitate thoroughly to return to normal state.



APPLICATION INFORMATION

Recommended Dosage

Dosage rates will vary depending on the cementitious materials used in the grout, the cementitious material loading, the presence of other admixtures, ambient conditions and the requirements of a specific project.

For general cement and cement / bentonite injection grout applications, Sika recommends a dosage rate between 400–800 mL/100 kg of cementitious materials. Dosage rates outside the recommended range may be used where extreme ambient conditions are encountered or unusual project conditions require special Recommended Dosage consideration. Where high superplasticizing action is required dosage may be increased. Please contact your Sika Canada Technical Sales Representative for further information and project specific dosage recommendations.

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

MIXING

For best superplasticizing results, add Sika® Stabilizer-5012 TBM CA directly to freshly mixed grout in the mixer at or near the end of the batching cycle. It may also be dispensed as an integral material during the regular admixture batching cycle. To optimize the superplasticizing effect after the addition of Sika® Stabilizer-5012 TBM CA, Sika recommends that the combined materials be mixed with high shear for a minimum of 1 minute. Do not introduce Sika® Stabilizer-5012 TBM CA directly onto dry cementitious materials.

Combination with other admixtures: Sika® Stabilizer-5012 TBM CA is highly effective as a single admixture or in combination with other Sika admixtures. If used in combination with certain other high range water reducers, it may affect the plastic properties of fresh grout. Please contact your Sika Canada Technical Sales Representative for further information.

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

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