

PRODUCT DATA SHEET

Sika® Stabilizer-5011 TBM TH

Cement Hydration Control Admixture

DESCRIPTION

Sika® Stabilizer-5011 TBM TH is liquid admixture for stabilizing and retarding cement/bentonite grout. Sika® Stabilizer-5011 TBM TH is used as stabilizer and retarder to produce good quality concrete. Offer similar benefits than admixtures complying with ASTM C494 Type D.

USES

Sika® Stabilizer-5011 TBM TH is used in cement/bentonite injection grouts commonly used in back-filling operations during tunnels excavations by Tunnel Boring Machine.

Sika® Stabilizer-5011 TBM TH is used in structural and mass concrete where long setting times and improved workability are required, such as projects with;

- Large pours, to prevent formation of cold joints
- Long travel times from the concrete plant to the site
- Difficult placing conditions and details
- High ambient temperature

FEATURES

Use in cement grout mix

- Improve open time of cement/ bentonite grout
- Reduce sedimentation of cement/ bentonite grout
- Only set retarding, does not delay the hardening process

Use in concrete mix

- Allow substantial cement reduction compared to plain concrete
- Increase in ultimate strength
- Good control of slump loss even at elevated ambient temperature
- Reduce shrinkage and creep
- Chloride free, does not attack reinforcement steel

PRODUCT INFORMATION

Composition	Carbohydrate
Packaging	200 L. drum, 1000 L. IBC
Shelf life	12 months. Stored properly in original unopen packing conditions
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperature between +5°C and +30°C
Appearance and colour	Liquid / Brown
Density	1.220 - 1.240 kg./L at 25°C
pH-Value	4.0 - 6.0 at 25°C

APPLICATION INFORMATION

Recommended dosage	0.2 - 2.0 L per 100 kg of cement
Compatibility	Sika® Stabilizer-5011 TBM TH may be combined with all Sikament®, Sika® Aer, Sika® Pump, SikaCrete® PP-1, Sika® Stabilizer-4001 TBM TH, SikaSet®-1 GV products but must be added separately to the mix and not pre-mixed prior its addition. Sika® Stabilizer-5011 TBM TH is compatible with all Portland Cement types.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

Overdosing will result in increased workability and setting time of the concrete. However provided that curing is effective, ultimate concrete strength and properties will not be effected. Use an appropriate concrete mixer and do not mix by hand. Trial mixes are recommended to establish exact dosage rates required to suitable individual requirements.

Effective measures for concrete curing must be followed.

Please contact Sika Technical Department for further assistance.

ECOLOGY, HEALTH AND SAFETY

Avoid prolonged contact with skin. Wash off thoroughly with soap water. In case of contact with eyes or mouth, rinse immediately with clean water and seek medical attention without delay.

APPLICATION INSTRUCTIONS

MIXING

Use in Cement Grout Mix

Sika® Stabilizer-5011 TBM TH is added at the end of the cement/ bentonite grout production. Mixing sequences : Water / Bentonite / Cement / Sika® Stabilizer-5011 TBM TH added further 2 minutes mixing is required.

Use in Concrete Mix

Sika® Stabilizer-5011 TBM TH is either added to the gauging water prior to its addition to the dry concrete mix or added separately to wetted concrete mix, further mixing should take place for at least 1 minute per m³

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. 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.

Sika (Thailand) Limited
700/37 Moo 5 Amata City Chonburi
Industrial Estate, T. Klong Tamhru
A. Muang, Chonburi 20000, Thailand
Tel : +66 3810 9500
E-mail : sikathai@th.sika.com
Website: tha.sika.com



Product Data Sheet
Sika® Stabilizer-5011 TBM TH
September 2024, Version 01.01
021404071000000178

SikaStabilizer-5011TBMTH-en-TH-(09-2024)-1-1.pdf

