

PRODUCT DATA SHEET

Sika® Stabilizer-1215 TBM PH

New generation of foaming agent for heterogeneous grounds in TBM applications

DESCRIPTION

Sika® Stabilizer-1215 TBM PH is a cost-effective, high-performance foaming agent based on biodegradable raw materials. It allows the TBM operator to control the rheology of the soil without altering the construction performance.

The increased foam stability ensures proper EPB pressure and better control of the ground pressure, reducing the risk of additional ground settlement at the surface and over excavation.

USES

Sika® Stabilizer-1215 TBM PH is used to create a highly stable foam to hold the face pressure and maintain the rheology of the excavated ground longer than conventional foaming agents.

Sika® Stabilizer-1215 TBM PH is used for:

- Silty to sandy soils in environments above +11 °C

CHARACTERISTICS / ADVANTAGES

- Improves overall tunnel performance
- Ability to work with high FER values avoiding the collapse of the foam, compared to standard foaming agents
- Reduces FIR (Foam Injection Ratio) values to obtain the desired soil rheology, compared to standard foaming agents
- Reduces tunnel excavation time
- Reduces TBM maintenance costs
- Facilitates muck extraction from tunnel and from the muck pit area
- Improves face excavation support pressure and control
- Reduces risk of surface settlement
- Reduces soil permeability very quickly

PRODUCT INFORMATION

Chemical Base	Surfactant
Packaging	1000 L (IBC)
Appearance / Colour	Clear to slightly turbid liquid
Shelf Life	12 months from date of production
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10°C and +40°C. Refer to the current Safety Data Sheet for information on safe handling and storage.
Specific gravity	0.980 - 1.020

APPLICATION INFORMATION

Recommended Dosage	The Product is used as aqueous solution with a typical 1–3 % concentration, depending on the Plasticity Index (PI) and level of stickiness of the clayey soil. Contact Sika Technical Services for additional information.
Compatibility	Compatible with Sika® admixtures and other Sika® products. Contact Sika Technical Services for additional information.

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.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

APPLICATION

1. Conduct preliminary trials in the laboratory to determine foam injection parameters, such as Concentration (Cf), FER and FIR.
2. The Product is used with the standard foam generators installed in all EPB machines. Inject it at the front of the cutterhead, into the excavation chamber or into the screw conveyor.
3. Analyse the TBM data regularly to monitor Product performance.

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.

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