

## PRODUCT DATA SHEET

# Sika® Stabilizer-1219 TBM

New generation high-performance foaming agent for heterogeneous ground in TBM applications

### DESCRIPTION

Sika® Stabilizer-1219 TBM is a high-performance foaming agent based on biodegradable raw materials. It is used to improve tunnelling performance in low-temperature environments. It remains stable at low temperatures to control the rheology of the soil without altering the construction performance.

The Product improves foam stability for better control of the ground pressure, reducing the risk of additional ground settlement at the surface and over excavation.

### USES

Sika® Stabilizer-1219 TBM 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-1219 TBM is used for:

- Soil conditioning in gravel to silty soils in environments with low temperatures.

### FEATURES

- 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
- No separation and high foam stability at low temperatures
- Reduces soil permeability very quickly
- Very good performance also at high temperatures

### PRODUCT INFORMATION

<b>Composition</b>	Surfactant
<b>Packaging</b>	Intermediate Bulk Container (IBC) 1000 L Refer to the current price list for available packaging variations.
<b>Shelf life</b>	12 months from date of production
<b>Storage conditions</b>	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +40 °C. Always refer to the packaging. Do not allow the Product to freeze. Refer to the current Safety Data Sheet for information on safe handling and storage.

Appearance and colour	Liquid, transparent	
Density	(1.025 ± 0.025) kg/L	(EN ISO 2811-1)

## SYSTEM INFORMATION

Compatibility	Compatible with Sika® admixtures and other Sika® products. Contact Sika Technical Services for additional information.
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## APPLICATION INFORMATION

Recommended dosage	The Product is used as aqueous solution with a typical 1–3 % concentration, depending on ground conditions. Contact Sika Technical Services for additional information.
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## 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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## 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 Australia Pty Limited  
 ABN 12 001 342 329  
 aus.sika.com  
 Tel: 1300 22 33 48