

## PRODUCT DATA SHEET

# Sika® Stabilizer-1514 TBM

(formerly MasterRoc® ACP 143)

Anti-clogging foaming agent for Tunnel Boring Machines (TBM)

## DESCRIPTION

Sika® Stabilizer-1514 TBM is a foaming agent especially designed for conditioning clayey grounds where clogging and adhesion is the issues. Sika® Stabilizer-1514 TBM improves the rheology of the excavated soil and facilitates extraction from outside the excavation chamber by reducing clogging and adhesion to metal parts of the machine.

## USES

Sika® Stabilizer-1514 TBM is used for sticky clay soils prone to clogging and adhesion issues. Particularly effective at low temperatures.

## FEATURES

- Reduces clogging and adhesion to metal parts of the TBM during excavation
- Creates plastic deformation properties in the soil, which increases face stability
- Prevents the formation of lumps which can block the metal parts of the TBM
- Reduces the torque and favours the increase of TBM penetration rate
- Disperses clay, reducing its stickiness and adhesiveness, even under pressure or high temperature of the cutterhead and in the excavation chamber
- Reduces inner friction and abrasiveness of the soil at the cutterhead and shield
- No separation and high foam stability at low temperatures

## PRODUCT INFORMATION

Composition	Ionic surfactant
Packaging	1000 L flowbin
Shelf life	12 months from date of production
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5°C and +40°C. Always refer to packaging. Do not allow the product to freeze.
Appearance and colour	Brown liquid
Density	1.04 ± 0.025 kg/l (EN ISO 2811-1)
Solubility	Soluble in water

## SYSTEM INFORMATION

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

<b>Recommended dosage</b>	Sika® Stabilizer-1514 TBM 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.
<b>Dispensing</b>	Easily injectable by any standard foam generator installed in TBM EPB machines.
<b>Material temperature</b>	At low temperatures the product can become slightly turbid, but this doesn't affect the performance once remixed and homogenized being the formulation chemically reversible. Do not allow the product to freeze.

## BASIS OF PRODUCT DATA

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

## ECOLOGY, HEALTH AND 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

### APPLICATION

1. Conduct preliminary trials in the laboratory to determine foam injection parameters, such as Concentration (Cf), FER and FIR.
2. Sika® Stabilizer-1514 TBM 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 Sika® Stabilizer-1514 TBM performance.

## 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 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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ISO 9001, 14001, 45001 – SGS  
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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



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### Product Data Sheet

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