

## PRODUCT DATA SHEET

# Sika® Stabilizer AGA 255

(formerly MasterRoc® AGA 255)

Stabilizing admixture with set retarding properties for annular grout mixes for TBM tunneling

### DESCRIPTION

Sika Stabilizer AGA 255 is a powerful liquid plasticizer which disperses and deflocculates cement particles whilst delaying the hydration process, thereby retarding the initial and final set. It can be used to improve fluidity without the addition of extra water, or to allow reductions in the free water content. Due to improved dispersion of the cement particles the process of hydration proceeds under the optimum conditions, leading to improved strength characteristics with or without reduction in free water.

### USES

- High flow, low cement content, high W/C ratio annular grout mixes for TBM tunneling.
- Hot weather applications of grout where control of initial and final set is important.
- Setting control grout mixes for injection into the annular void behind segmental tunnel linings.
- Sika Stabilizer AGA 255 is designed for use in one or two component grouting systems and is compatible with accelerators such as Sika Stabilizer AGA 370.

### CHARACTERISTICS / ADVANTAGES

- Increases the compressive, tensile, and flexural strength of grout.
- Increases density of grout mixes reducing permeability and thus increasing durability.
- Allows a reduction in free water in the region of 5-12%.
- Highly effective in low cement content high water cement ratio mixes where its use enables grout to be made more workable without loss in strength, density, and durability.
- Enables controlled extension of initial set.
- The retarding action allows storage of the annular grout in the pumping lines and grout agitator tanks on the TBM for up to 72 hours depending on dosage.
- The strength gain of annular grouts containing Sika Stabilizer AGA 255 is enhanced. After retardation of initial and final set, a more rapid hardening of the grout occurs.

### PRODUCT INFORMATION

<b>Packaging</b>	1000 liter IBCs or 210 liter drums
<b>Shelf Life</b>	12 months from date of production if stored properly in undamaged unopened, original sealed packaging
<b>Storage Conditions</b>	Store in sealed containers or storage tanks to protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult local Technical Services Department.
<b>Appearance / Colour</b>	dark brown liquid
<b>Specific gravity</b>	1.23 to 1.29

## APPLICATION INFORMATION

<b>Recommended Dosage</b>	Field trials should be conducted to determine the optimum addition rates of Sika Stabilizer AGA 255. As a guide to these trials, a dosage range of 750 to 1500 ml per 100 kg of cement should be adequate.
<b>Dispensing</b>	Sika Stabilizer AGA 255 should be added to the annular grout mix during the mixing cycle, at the same time as the water, or the bentonite. Never add Sika Stabilizer AGA 255 to the dry cement. No extension to normal mixing time is necessary.
<b>Compatibility</b>	Sika Stabilizer AGA 255 can be used with all types of Portland cement including sulphate resisting (Type V). For use with other special cements, contact your local Sika Technical representative. Sika Stabilizer AGA 255 should not be premixed with other admixtures. If other admixtures are to be used in annular grouts containing Sika Stabilizer 255, they must be dispensed separately. If in doubt, consult your local Sika technical representative.

## 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.

## LIMITATIONS

A severe over dosage of Sika Stabilizer AGA 255 will result in:

- Increased retardation of initial and final set.
- Increase in workability.

Providing annular grout is properly cured the ultimate strength of the grout will not be adversely affected. Care should be taken to allow for the effect on injection pressures and advance rates.

## 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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## 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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