

PRODUCT DATA SHEET

Sika® Stabilizer-100 MM

(formerly MasterMatrix® 100)

High performance viscosity modifying agent (VMA) for fluid concrete

DESCRIPTION

Sika® Stabilizer-100 MM is an innovative product. It is an aqueous solution of a high-molecular weight synthetic copolymer.

Thanks to its tailored mode of action in concrete, Sika® Stabilizer-100 MM imparts a level of viscosity within a mix enabling the right balance between fluidity, passing ability and resistance to segregation - apparently opposing properties - to be achieved. The balance is lacking when the fluidity of the concrete is obtained by adding water.

USES

Sika® Stabilizer-100 MM is optimized for use whenever an increase in mix viscosity would be advantageous, especially for:

- SCC (Self-compacting concrete) with a low fines content (material passing the 0.125 mm sieve)

CHARACTERISTICS / ADVANTAGES

- Economy: Savings on fines (< 0.125 mm), up to 40 % faster placing and up to 5 times higher placing productivity.
- Ecology: Less fines - less CO₂, and higher concrete durability.
- Ergonomic: No vibration, no noise, low stickiness of the concrete mixture.
- Prevents segregation and bleeding.
- Can be used with all types of cement.
- Does not affect setting time.
- Mixes are less sensitive to changes in water demand.

PRODUCT INFORMATION

Composition	Modified polycarboxylic ether based	
Packaging	<ul style="list-style-type: none"> ▪ 1000 L IBC tank ▪ Bulk delivery 	
Appearance / Colour	Liquid, brown.	
Shelf Life	12 months from date of production if stored properly in original and unopened packaging.	
Storage Conditions	<p>In dry conditions at temperatures between +5 °C and +35 °C. Protect from direct sunlight and frost.</p> <p>Frost: If frozen or if precipitation has occurred, the Product may be used after thawing slowly at room temperature and intensive mixing.</p>	
Density	0.99–1.03 kg/l, 20 °C	(ISO 758)
pH-Value	5.50–9.50 (10 % Solution)	(ISO 4316)

TECHNICAL INFORMATION

Concreting Guidance

Sika® Stabilizer-100 MM is a ready-to-use liquid admixture, which should be added to the concrete during the mixing process together with the water. This is particularly important in order to obtain maximum efficacy. For best performance it is advisable to continue mixing until the mix is completely homogeneous.

APPLICATION INFORMATION

Recommended Dosage

Sika® Stabilizer-100 MM is batched on the total of fines below 0.1 mm and is recommended between 0.1–1.0 % by weight of fines.

- The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilized in special cases according to specific job conditions. If required consult Sika Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect.

SYSTEM INFORMATION

Compatibility

Sika® Stabilizer-100 MM can be used with all types of EN 197 Cements. For use with other special cements, contact our Sika Technical Services Department.

Sika® Stabilizer-100 MM should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing Sika® Stabilizer-100 MM they must be dispensed separately. The rheological behavior induced by Sika® Stabilizer-100 MM is optimized when used in combination with Sika® ViscoCrete® superplasticizer. It is incompatible for use with naphthalene sulphonate based superplasticizers. To produce highly fluid concretes or SCC, Sika® Stabilizer-100 MM needs be used in combination with a superplasticizer admixture of the Sika® ViscoCrete® range in order to guarantee maximum efficacy. When such complimentary admixtures are required it is important that laboratory trials are performed, prior to any supply, to determine the respective dosages of any complimentary admixture, and the suitability, in the fresh and hardened state, of the resultant concrete. In these circumstances we recommend that you consult our Sika Technical Services Department for further advice.

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

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.

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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