

PRODUCT DATA SHEET

Sika® Visco I-100

PUMPING AID ADMIXTURE FOR CONCRETE



DESCRIPTION

Sika® Visco I-100 is a concrete admixture, based on special polymers, aiming to improve the cohesiveness and homogeneity of the concrete mixtures, so as to enable easier pumpability of difficult mixes and protect the equipment involved.

USES

Sika® Visco I-100 is used for concrete mixes that feature large variations of fine aggregate content, low cement content and bag granulometry. It is especially suitable for:

- Mixes that have the tendency to segregate when pumped and/ or exhibit high pressure in the pumping equipment
- Mixtures with low quality aggregates (e.g. increased concentration of clay, extremely fine aggregate powder, high absorption aggregates), which have a negative effect on the mix design's characteristics
- Mixtures that lack an aggregate fracture, a fact that makes it hard to obtain a uniform mix design with high quality properties
- Mixtures with low fine content (aggregates + cement)
- Site batched and ready mix concrete

CHARACTERISTICS / ADVANTAGES

- Sika® Visco I-100 greatly increases the internal cohesion, plasticity and flexibility of the fresh concrete. This property leads in improved workability and especially pumpability of the mixture.
- Reduces segregation.
- Break-ups during concreting are significantly reduced or eliminated and the effectiveness of the concreting is significantly improved.
- Strain to the equipment and the pump itself is reduced significantly and their expected time of useful usage is prolonged.
- Does not affect negatively none of the properties of hardened concrete.
- Sika® Visco I-100 does not contain chlorides or any other substances that cause reinforcement corrosion and can be used without restriction for reinforced and prestressed concrete structures.

APPROVALS / CERTIFICATES

Water retaining admixture (Table 4) according to EN 934.02:2009+A1:2012, Declaration of Performance 14238691, and provided with the CE-mark.

PRODUCT INFORMATION

Chemical base	Composition of polyhydroxides in aqueous solution
Packaging	IBC Bulk supply upon request
Appearance / Colour	Liquid, light brown
Shelf life	12 months from date of production
Storage conditions	Store properly in original, undamaged, unopened, sealed packaging, in dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight and frost.

Density ~ 1,0 kg/l (at +23°C)

pH-Value 7.5-9.5 (at +23°C)

TECHNICAL INFORMATION

Concreting Guidance The standard rules of good concreting practice, concerning production as well as placing, are to be followed. Refer to relevant standards. Fresh concrete must be cured properly.

APPLICATION INFORMATION

Recommended Dosage

- 0,5 kg/m³ to improve the homogeneity of conventional mixtures
- 0.2-0.5% b.w. of cement in cases of lack of fines (aggregates + cement)
- 0.5-1.5% b.w. of cement to improve the cohesiveness of the mix

Compatibility Sika® Visco I-100 can be combined with the following Sika products:

- Sika®-1+ / Sika® WT-200 P
- Sika® Plastiment® / SikaPlast® / Sika® ViscoCrete® superplasticizer series
- Sika-Aer® Fine
- Sika® Ferrogard®-901
- Sikafume® HR-E / Sikacrete® AR
- Sika® Rapid-2
- Sika® Antifreeze

In all cases, trials are recommended before combining products.

Dispensing Sika® Visco I-100 is added to the fresh concrete at the batching plant or in the concrete truck prior to the concreting. In case of addition on site into the concrete truck, in order to obtain best results, a mixing time of ~ 1 min/m³ should be observed.

IMPORTANT CONSIDERATIONS

- When using Sika® Visco I-100 a suitable mix design has been taken into account and local material sources should be tested.
- Sika® Visco I-100 should not be added to dry cement.
- Sika® Visco I-100 should be added with the mixing water or introduced at the end of the mixing process.
- Before application, suitability tests must be performed.
- If frozen, Sika® Visco I-100 can be re-used after being slowly thawed at room temperature and intensively remixed.
- Sika® Visco I-100 modifies slightly the viscosity of the mix and for this reason demands higher mixing time than the conventional mix.

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.

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.

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.

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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