

PRODUCT DATA SHEET

Sika ViscoFlow[®]-500

SUPERPLASTICIZING CONCRETE ADMIXTURE FOR PROLONGED SLUMP RETENTION



DESCRIPTION

Sika ViscoFlow[®]-500 is an admixture especially designed for use in cases of demands for prolonged slump maintenance. It is based on Sika's polycarboxylate technology.

USES

Sika ViscoFlow[®]-500 is especially suitable for production of mixes with demands for prolonged slump maintenance, as well as improved rheological characteristics.

Sika ViscoFlow[®]-500 is used mainly for the following applications:

- Any concrete transportation under hot/cold climatic conditions for prolonged period and with demand for workability maintenance
- High quality Site batched/ Ready Mix concrete
- Define the workability time based on project requirements, without a negative effect on early strength development
- Production of concrete mixes with high water reduction
- For qualitative, high demand projects
- For high durability concrete

CHARACTERISTICS / ADVANTAGES

Sika ViscoFlow[®]-500 works based on a combination of electrostatic adsorption and steric repulsion effects. Thus, solid particles can be effectively dispersed and a high level of fluidity can be reached with less water. As a result, Sika[®] ViscoFlow[®]-500 can provide higher workability time and stability than conventional dispersants. With its use we have the following advantages:

- Concrete production with high initial slump category
- High concrete flowability and prolonged maintenance of it
- Workability maintenance, but without this imposing any negative effects on strength development
- Constant slump flow and smoothness of the concrete for a prolonged period of time
- Easiness in handling, placing and vibrating concrete
- Concrete production with high density and reduced water permeability
- Reduced shrinkage and creep
- Constructions with high aesthetical appearance and prolonged durability
- Sika ViscoFlow[®]-500 does not contain chlorides and is therefore suitable for prestressed and reinforced concrete

APPROVALS / CERTIFICATES

High range water reducing / superplasticizing admixture (Tables 3.1 & 3.2) and Set retarding / high range water reducing / super plasticizing admixture (Tables 11.1 & 11.2) according to EN 934.02:2009+A1:2012, Declaration of Performance 17740524, and provided with the CE-mark.

PRODUCT INFORMATION

Chemical base	Aqueous solution of polycarboxylate polymers
Packaging	IBC, 210 kg drums, 20 kg containers. Bulk supply on demand.

Appearance / Colour	Liquid, light brown
Shelf life	8 months from date of production
Storage conditions	Store properly in undamaged, unopened, original sealed packaging, in dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight and frost.
Density	~1.05 kg/l (at +20°C)
pH-Value	3.5 – 5.5 (at +20°C)
Total Chloride Ion Content	Free (EN 934.01)

TECHNICAL INFORMATION

Concreting Guidance

APPLICATION INFORMATION

Recommended Dosage	0.4 - 2.5 % b.w. of cement. Dosages >2.0% may be used in cases of high demands for workability maintenance, very absorbent aggregates, very high temperatures, e.t.c.
Compatibility	Sika ViscoFlow®-500 can be combined with the following Sika products: - Sika® Plastiment® series - Sika® Plastocrete® N/ Sika®-1+ / Sika® WT-200 P - Sika® Visco I-100 - Sika® Aer Fine - Sika® Ferrogard®-901 S - Sikafume® HR-E / Sikacrete® AR - Sigunit® shotcrete accelerators Trials are recommended before combining products.
Dispensing	Sika ViscoFlow®-500 is added to the gauging water at the plant or added on-site into the concrete mixer.
Restrictions	<ul style="list-style-type: none"> ▪ When using Sika ViscoFlow®-500 a suitable mix design has been taken into account and local material sources should be trialled. ▪ Sika ViscoFlow®-500 should not be added to dry cement. ▪ Sika ViscoFlow®-500 should be added with the mixing water or introduced at the end of the mixing process. ▪ Before application, suitability tests must be performed.

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.

Sika Hellas ABEE
15 Protomagias Str.
14568 Kryoneri
Attica-Greece
Tel.: +30 210 8160 600
Fax: +30 210 8160 606
www.sika.gr | sika@gr.sika.com



SikaViscoFlow-500_en_GR_(12-2017)_1_1.pdf

Product Data Sheet
Sika ViscoFlow®-500
December 2017, Version 01.01
021301011000001189