BUILDING TRUST

PRODUCT DATA SHEET

Sika ViscoFlow®-77

Workability enhancing admixture

DESCRIPTION

Sika® ViscoFlow® 77 is a workability enhancing admixture for concrete. It is a plasticiser / water reducer based on specially developed **Sika ViscoFlow® technology** which gives concrete, long to extremely long workability retention.

Sika® ViscoFlow® 77 can be used alone with weakly alkaline cements or in conjunction with another Sika water reducer as a workability regulator with medium or strong alkaline cements.

Sika ViscoFlow®-77 improves the workability and rheology of concrete containing poor quality sand or aggregates.

USES

Sika® ViscoFlow® 77 enables the manufacture of concrete with a soft wet concrete rheology that can be transported over very long distances.

- Long to extremely long workability retention (2hrs to 6hrs depending on dosage).
- Concrete pumped over very long distances
- Concrete in hot weather
- Concrete with heavily reinforced structures

CHARACTERISTICS / ADVANTAGES

Sika® ViscoFlow® 77 is a plasticiser which gives concrete the following properties:

- Long to extremely long workability retention (2hrs to 6hrs depending on dosage).
- Enhances the workability of concrete containing poor quality sand or aggregates
- Lower viscosity concrete
- Constant slump flow and smoothness of the concrete over hours.
- Improves the rheology of concrete made with aggregates having a lack of fines

Sika® ViscoFlow® 77 can be used alone or in combination with other Sika water reducers depending on the alkaline content of the cement

PRODUCT INFORMATION

Chemical Base	Modified polycarboxylate in water
Packaging	200Ltr drums (non returnable). 1000 litre IBC's
Appearance / Colour	Clear light yellowish liquid
Shelf Life	12 months from date of production
Storage Conditions	Store properly in undamaged unopened, original sealed packaging, in dry conditions at temperatures between +5°C and +30°C. Protect from direct sunlight and frost.
Density	1.07 kg/l (at +20°C) ± 0.05
pH-Value	4.5 ± 1.0

Recommended Dosage	Complete dosage range: **0.1 – 1.5% of the weight of cement or binder** (according to the concrete fluidity required or the desired performance). Typical dosage range: **0.5 – 1.0% of the weight of cement or binder** (500 - 1000 ml/100kg cementitious)
Compatibility	**Sika® ViscoFlow® 77 may be combined with** many other Sika Products as well as **Sika Plasticiser Products to improve workability retention and wet concrete rheology.** Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.
Dispensing	Sika® ViscoFlow® 77 is added to the gauging water or added with it into the concrete mixer. To take advantage of the workability enhancing ability, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended. To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time. Sika® ViscoFlow® 77 can also be added directly to the freshly mixed concrete in the concrete mixer at the end of the batching cycle.

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

APPLICATION INSTRUCTIONS

The standard rules of good concreting practice, concerning production and placing, are to be followed. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components. Fresh concrete must be cured properly and curing applied as early as possible.
When using Sika® ViscoFlow® 77 a suitable mix design has to be taken into account and local material sources shall be trialled.
Sika® ViscoFlow® 77 shall not be added to dry cement.
If Sika® ViscoFlow® 77 used at high dosages or is overdosed it will increase the setting time of concrete.
Frost: If frozen and / or if precipitation has occurred, Sika® ViscoFlow® 77 may be used after thawing slowly at room temperature followed by intensive remixing.

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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