

PRODUCT DATA SHEET

Sika ViscoFlow[®]-1100

SUPERPLASTICIZER / HIGH RANGE WATER REDUCER

DESCRIPTION

Sika ViscoFlow[®]-1100 is a high water-reducing admixture. With extended workability properties for concrete and mortar. It meets the requirements for set-retarding / superplasticizing admixtures according to EN 934-2: 2001.

USES

Sika ViscoFlow[®]-1100 is used for the production of ready-mix concrete with extended workability and where long-distance transport is required.

Sika ViscoFlow[®]-1100 is recommended for :

- Concrete with the greatest possible water reduction (up to 30%)
- High-performance concrete
- Concreting in hot weather
- Concrete with long workability without delayed setting effect
- Concrete with low W/C ratio
- Concrete produced with highly reactive cement

FEATURES

Through surface absorption and sterical effects separating the binder particles, the following properties are achieved:

- Extremely powerful water reduction (resulting in high concrete density and strength)
- Extends workability while maintaining high initial strength
- Excellent plasticising effects, resulting in improved flow, placing and compaction characteristics
- Significantly improved watertightness
- Reduced shrinkage
- Reduced carbonation of concrete

Sika ViscoFlow[®]-1100 does not contain chlorides or any other materials which promote the corrosion of steel reinforcement. It is therefore suitable for reinforced and pre-stressed concrete.

CERTIFICATES AND TEST REPORTS

Sika ViscoFlow[®]-1100 meets the requirements of NF EN 934-2

PRODUCT INFORMATION

Composition	Aqueous solutions of modified Polycarboxylate.
Packaging	IBC : 1050 Kg
Appearance and colour	Light brown liquid
Shelf life	12 months
Storage conditions	Store properly in an undamaged and unopened original sealed containers, in dry conditions and at temperatures between +5° C and +30° C. Protect from direct sunlight and frost.
Density	1,05 ± 0,01
pH-Value	5,13 ± 0,5

APPLICATION INFORMATION

Recommended dosage	Usual dosage range : 0.3 to 1.5% of the weight of the cement or binder. It is possible to consider dosages exceeding 1.5% for unconventional applications. However, it is imperative to conduct preliminary tests. If necessary, please contact Sika's technical service for appropriate advice and recommendations.
Compatibility	Sika ViscoFlow®-1100 may be combined with many other Sika Products. Trials must be performed before combining products in a concrete mix.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS OF USE

- When using Sika ViscoFlow®-1100 a suitable mix design must be selected and local material sources should be trialled.
- If frozen and/or if precipitation has occurred, Sika ViscoFlow®-1100 may only be used after thawing slowly at room temperature and intensive mixing.
- Sika ViscoFlow®-1100 should not be added to dry cement.
- Before pouring, suitability tests on the fresh concrete must be carried out.
- Due to the extended workability, take special care that formwork is properly installed and secured.

ECOLOGY, HEALTH AND SAFETY

Unmixed / mixed material must be disposed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities. Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the Material Safety Data Sheet.

APPLICATION INSTRUCTIONS

MIXING

DISPENSING

Sika ViscoFlow®-1100 is added to the gauging water at the plant or added on site into the concrete mixer. Allow enough time for the concrete to mix thoroughly.

The standard rules of good concreting practice, concerning production and placing, are to be followed. Refer to relevant standards. Fresh concrete must be cured correctly.

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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