

# PRODUCT DATA SHEET

## Sika ViscoFlow<sup>®</sup>-4005 NS

### HIGH PERFORMANCE WORKABILITY ENHANCING SUPERPLASTICIZER

#### DESCRIPTION

Sika ViscoFlow<sup>®</sup>-4005 NS A specially designed PCE based SuperPlasticizer to achieve a significantly enhanced slump flow retention without additional retardation.

#### USES

Sika ViscoFlow<sup>®</sup>-4005 NS is especially suitable for concrete mixes with extended workability requirements as well as improved flow characteristics.

Sika ViscoFlow<sup>®</sup>-4005 NS is mainly used for the following types of concrete:

- Any concrete hot/cold weather with extended transportation and workability time
- Suitable for a wide range of applications with high or low W/C and /or high or low environment temperatures
- Define the workability time based on project requirements without a negative effect on early strength development

#### CHARACTERISTICS / ADVANTAGES

Sika ViscoFlow<sup>®</sup>-4005 NS produces a more uniformly cohesive high quality free flowing concrete

Sika ViscoFlow<sup>®</sup>-4005 NS will result in the following advantages of concrete:

- Improved dispersion properties
- Keeps workability for extended time
- Slump flow retention without additional retardation
- Constant slump flow
- Smooth concrete and concreting operations
- Improved rheology
- Improved strength development
- Reduced drying shrinkage
- Improved durability

#### APPROVALS / STANDARDS

IS 9103, ASTM C494

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Aqueous solution of modified poly carboxylate
<b>Packaging</b>	255 kg drums /Bulk supply
<b>Appearance / Colour</b>	Brown Liquid
<b>Shelf Life</b>	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
<b>Storage Conditions</b>	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
<b>Density</b>	~1.11 kg/l at 25°C
<b>pH-Value</b>	≥ 6

## APPLICATION INFORMATION

### Recommended Dosage

Optimum dosage of Sika ViscoFlow®-4005 NS should be determined by site trials.  
Recommended dosage: 0.2 – 2.0% by weight of cementitious.  
A higher dosage might be used if agreed by client or consultant. Stir well before use.

### Compatibility

Sika ViscoFlow®-4005 NS may be combined with many other Sika® Products.  
Compatible with all types of cement and cementitious materials.  
Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

## APPLICATION INSTRUCTIONS

### DISPENSING

Sika ViscoFlow®-4005 NS can be added into the mixing water or directly into the concrete mixer after 50 – 70% of the mixing water has been added.  
The addition of Sika ViscoFlow®-4005 NS to dry aggregate or cement is not recommended.  
To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

### FURTHER DOCUMENTS

Excessive water addition or overdosing may cause bleeding or segregation.  
If frozen and / or if precipitation has occurred, Sika ViscoFlow®-4005 NS may be used after thawing slowly at room temperature and after intensive mixing.

### 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

### 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 Material Safety Data Sheet 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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