

## PRODUCT DATA SHEET

# Sika ViscoFlow<sup>®</sup> HES 1039 Sure

(formerly MasterSure<sup>®</sup> HES 1039)

New generation of high range water reducing / superplasticizing admixture with extended consistency retention for low w/c ratio precast concrete

### DESCRIPTION

Sika ViscoFlow<sup>®</sup> HES 1039 Sure (High Early Strength) is an innovative new generation of chloride free superplasticizer of polycarboxylic ether (PCE) polymers with good water reduction with extended consistency retention dedicated to precast concrete, where high early strengths are needed in order to speed up precast operation of demoulding and moving of the elements to the stocking yard and area.

The fresh concrete shows no segregation even at low water cement ratio and, consequently, high early and long-term strengths.

### USES

Sika ViscoFlow<sup>®</sup> HES 1039 Sure is suitable for work with normal to low water/cement ratios. The high water reduction and early strength make Sika ViscoFlow<sup>®</sup> HES 1039 Sure the ideal admixture for the precast concrete industry.

The use of Sika ViscoFlow<sup>®</sup> HES 1039 Sure also allows the manufacture of high performance concrete with high early and final strength.

### CHARACTERISTICS / ADVANTAGES

Sika ViscoFlow<sup>®</sup> HES 1039 Sure offers the following benefit for the precast concrete industry to:

- High water reduction - High early and ultimate strengths. Low permeability, high durability concrete.
- High workability - Ease of placing and compaction. Less vibration required even in case of steel reinforcement congestion. Less workmanship required.
- Superior finishing - Improves concrete finish. Excellent surface appearance and texture.
- Reduced slump loss - No retempering. Ease of delivery to point of placement.
- Low shrinkage and creep - Improved dimensional stability. Reduced risk of cracks.
- Superior cohesion - Ease of pumping.
- Minimal bleed water - Improved surface quality.

As compared to the traditional superplasticizers, the engineering properties such as early and ultimate compressive and flexural strengths, bond to steel, and modulus of elasticity, shrinkage, creep, and impermeability are improved.

### APPROVALS / STANDARDS

Sika ViscoFlow<sup>®</sup> HES 1039 Sure 1039 is formulated to comply with the requirements of ASTM C494 for Types A and F admixtures.

### PRODUCT INFORMATION

#### Packaging

- 1000 L IBC tank
- Bulk delivery

#### Shelf Life

12 months from date of production

#### Storage Conditions

Store at a temperature above 0 °C and in tightly sealed original containers. If frozen, thaw it and completely reconstitute by mild agitation. Do not use compressed air.

# SYSTEM INFORMATION

<b>Compatibility</b>	Sika ViscoFlow® HES 1039 Sure is compatible with all cements meeting recognised international standards. Sika ViscoFlow® HES 1039 Sure is compatible and recommended for use with viscosity modifying agents to produce SCC. Sika ViscoFlow® HES 1039 Sure is not compatible with the Sikament® RB superplasticisers.
----------------------	---

# APPLICATION INFORMATION

<b>Recommended Dosage</b>	Dosage of Sika ViscoFlow® HES 1039 Sure depends on the mix design, ambient conditions and degree of water reduction and workability required. Sika ViscoFlow® HES 1039 Sure is dispensed at a rate of 600 ml to 1400 ml per 100 kg of cementitious material. Other dosages may also be used depending on the specific working conditions. Trial mixes should be made with job materials to determine the optimum dosage required for a specified job requirement.
---------------------------	---

<b>Dispensing</b>	Sika ViscoFlow® HES 1039 Sure is a ready-to-use admixture that is added to the concrete at the time of batching. The maximum effect is achieved when Sika ViscoFlow® HES 1039 Sure is added after the addition of 50 % to 70 % of water. Sika ViscoFlow® HES 1039 Sure must not be added to the dry materials. A separate dispenser and feed line must be used.
-------------------	---

## 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

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains 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 Kimia Sdn. Bhd.**  
Lot 689, Nilai Industrial Estate,  
71800 Nilai, Negeri Sembilan D.K.  
Malaysia  
Phone: +606-7991762  
e-mail: info@my.sika.com  
Website: www.sika.com.my



**Product Data Sheet**  
Sika ViscoFlow® HES 1039 Sure  
June 2024, Version 01.01  
021301000000002002

SikaViscoFlowHES1039Sure-en-MY-(06-2024)-1-1.pdf

