

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2191 HE

## PRECAST ADMIXTURE, VERY HIGH EARLY STRENGTH WITH SLUMP RETENTION

### DESCRIPTION

Sika® ViscoCrete®-2191 HE is a highly effective liquid superplasticiser for the production of free flowing concrete or as a substantial water-reducing agent for promoting high ultimate and early strengths.

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2191 HE is compatible with all types of Portland Cement including Sulphate Resistant Cement (SRC). Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2191 HE is also suitable for promoting strength increase with cements containing other pozzolanic materials.

#### USES

Sika® ViscoCrete®-2191 HE is used as a superplasticiser in the production of free flowing concrete for:

- All precast concrete where additional placing time is required
- External readymix concrete supply to precast yards
- Precast concrete with longer concrete delivery time to moulds
- Slender components with densely packed reinforcements

Pre-stressed precast elements of all types

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2191 HE is also used as a high-range water reducing admixture for:

- Very high early strength pre-cast concretes
- High durability concretes (low water cement ratio)
- High strength and durability precast products

## **CHARACTERISTICS / ADVANTAGES**

As a superplasticiser:

- Initial and final workability is improved
- Fast placing of concrete in slender components with packed reinforcements
- Decreases the amount of vibration
- Suitable for use in conjunction with standard plasticizers and retarders (synergized mixes)
- Significantly reduces the risk of segregation
- Very high early strengths for precast or early stripping

As a water-reducer:

- Water reduction up to 25 % depending on dosage\*
- 28 days strengths improved by up to 40 %\*
- \* this will depend on dosage and mix design

## **APPROVALS / STANDARDS**

Meets the requirement of SS EN 934-2:2008, Table 3.2

| Composition         | Modified polycarboxylate type with additives                                |  |
|---------------------|---|--|
| Packaging           | <ul> <li>200 L drum</li> <li>1 000 L tank</li> <li>bulk delivery</li> </ul> |  |
| Appearance / Colour | Light brown turbid liquid   |  |
| Shelf Life          | 12 months from the date of production                                       |  |

#### **PRODUCT INFORMATION**

Product Data Sheet Sika® ViscoCrete®-2191 HE November 2018, Version 01.01 021301011000001935 Store in undamaged and unopened, original sealed containers, protected from direct sunlight and frost, at temperatures between +5 °C and +30 °C.

| Density                    | ~1.03 (at +20 °C) | (ISO 758-1976)      |
|----------------------------|-------------------|---------------------|
| pH-Value                   | ~4.5              | (ISO 4316-1977)     |
| Total Chloride Ion Content | < 0.1 %, m/m      | (BS EN 480-10:2009) |

### **APPLICATION INFORMATION**

**Recommended Dosage** 

Sika<sup>®</sup> ViscoCrete<sup>®</sup>-2191 HE can be used at the rate of 500–2 500 ml per 100 kg of cement depending on requirements concerning workability and strength. It is recommended that trial mixes be conducted to determine the exact dosage rate required.

For more specific requirements, advice is available from our Technical Service Department to determine the usage rate for optimum results.

## **APPLICATION INSTRUCTIONS**

#### DISPENSING

Sika® ViscoCrete®-2191 HE shall be dispensed neat into the premixed concrete after all the other concrete components, including total water, have been discharged into the pan-mixer or truck mixer. Do not dilute Sika® ViscoCrete®-2191 HE.

## **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 Kimia Sdn. Bhd. Lot 689, Nilai Industrial Estate, 71800 Nilai Negeri Sembilan D.K., Malaysia Phone: +606-7991762 Fax: +606-7991980 e-mail: info@my.sika.com Website: www.sika.com.mv





Product Data Sheet Sika® ViscoCrete®-2191 HE November 2018, Version 01.01 021301011000001935

SikaViscoCrete-2191HE-en-MY-(11-2018)-1-1.pdf



BUILDING TRUST