

#### **BUILDING TRUST**

## PRODUCT DATA SHEET

# Sika® ViscoCrete®-225 P

## High-Performance Superplasticizer /HRWRA



#### **DESCRIPTION**

Sika® ViscoCrete®-225 P is a high-performance superplasticizer and water reducer in powder form based on Sika® ViscoCrete® polycarboxylate polymer technology.

#### **USES**

Sika® ViscoCrete®-225 P is formulated for applications in systems with high calcium sulphate content or pure gypsum binders. The product is especially suitable for the production of dry-mixed mortars and concrete for applications like:

- Floor screeds, self-leveling screeds and underlayments
- Grouts, non-shrink grouts, repair mortars, tile adhesives
- Building plaster, render, stucco, bonding/filling compound, molding plaster, dental & medical plaster

Sika® ViscoCrete®-225 P can be used in the following binder systems:

- Calcium sulfphte binders (α- and β-hemihydrate, natural/thermal/synthetic anhydrite)
- Ternary compounds (Portland cement + calcium aluminate cement + calcium sulphate)
- Portland cement and cement blends, especially cement with high C<sub>3</sub>A, sulfate and alkali content

## **CHARACTERISTICS / ADVANTAGES**

Sika® ViscoCrete®, Sika's polycarboxylate technology, works based on a combination of electrostatic forces and steric repulsion effects. Thus, solid particles can be effectively dispersed. Sika® ViscoCrete®-225 P is adsorbed onto the surface of the binder particles and due to repulsive forces from the effect known as steric hindrance, the solid binder particles are very effectively dispersed in the mix.

The benefits of Sika® ViscoCrete®-225 P include, but are not limited to the following:

- High water reduction, resulting in high density and strength
- Excellent flowability, resulting in highly reduced placing- and compacting efforts
- Increased early strength development
- Improved shrinkage and creep behavior
- Reduced mixing times due to rapid adsorption
- Long-term stability enables long slump life
- Low influence on hydration, thus low activator/accelerator consumption
- Efficiency over a wide pH-range
- Compatible with other additives, e.g. citric acid
- Free of formaldehyde and ammonia

## APPROVALS / CERTIFICATES

Conforms to the requirements of EN 934–2, Table 3.1/3.2

#### PRODUCT INFORMATION

Composition	Modified polycarboxylates
Packaging	20 kg bags / 800 kg per pallet
Appearance / Colour	White to yellowish powder
Shelf life	24 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging.

#### PRODUCT DATA SHEET

**Sika® ViscoCrete®-225 P**August 2017, Version 01.02
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Storage conditions	Dry storage at temperatures up to 30°C. Protect from direct sunlight and contamination.
Bulk Density	$0.6 \pm 0.1 \mathrm{g/cm^3}$
pH-Value	4.0 ± 0.5 at +23 °C (40 % solution).
Total Chloride Ion Content	≤ 0.1 %
Equivalent Sodium Oxide	≤ 2.0 % (Na <sub>2</sub> O-equiv.)

#### APPLICATION INFORMATION

Recommended Dosage	Dosage rate varies depending on the application and due to variations in dry-mix composition. A typical dosage range is is 0.05 - 0.5 % by weight of binder. At high dosage bleeding and/or segregation may occur as well as retardation of setting.  Note: Preliminary testing is required to determine the exact dosage for your specific conditions. Please contact our technical service for more information and assistance.
Compatibility	Sika® ViscoCrete®-225 P may be combined with many other Sika products as well as with most existing activators/accelerators, retarders, redispersible powders, stabilizers and other additives used in dry-mix applications. In combination i.e. with other Sika® ViscoCrete® Powders and Retardan improvements in flowability and setting-time adjustment may be achieved Note:Always conduct trials before combining products in specific mixes and contact technical service for information about specific combinations with Sika products.
Dispensing	Sika® ViscoCrete®-225 P is added to the dry mix. For optimum utilisation we recommend a minimal wet mixing time of 30 seconds for mortar.

## **BASIS OF PRODUCT DATA**

found on the Internet at www.sika.de.

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

## **LOCAL RESTRICTIONS**

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## **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. Further notes and information data sheets on product safety and disposal can be



#### **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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Concrete

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PRODUCT DATA SHEET
Sika® ViscoCrete®-225 P
August 2017, Version 01.02
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SikaViscoCrete-225P-en-DE-(08-2017)-1-2.pdf

