

## PRODUCT DATA SHEET

# Sika® ViscoCrete® G-5

High-performance superplasticizer / water reducer for gypsum

### DESCRIPTION

Sika® ViscoCrete® G-5 is a high-performance superplasticizer and water reducer, in liquid form, based on Sika® ViscoCrete® polycarboxylate (PCE) polymer technology.

### USES

Sika® ViscoCrete® G-5 is formulated for applications in systems with high calcium sulphate content or pure gypsum binders.

The product is especially suitable for the manufacture of gypsum products like:

- Gypsum fiberboards, building elements, blocks
- Gypsum boards (also: plasterboards, wallboards)
- Partition panels, ceiling tiles

### CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete® G-5 works based on a combination of electrostatic forces and steric repulsion effects. Thus, solid particles can be effectively dispersed. The benefits of Sika ViscoCrete® G-5 include, but are not limited to the following:

- High water reduction at low dosage
  - Excellent flowability
  - Rapid adsorption
  - Very low retardation
  - No additional air entrainment
  - Compatible with other additives
  - Free of formaldehyde and ammonia
- Especially when utilized for gypsum board production the use of Sika® ViscoCrete® G-5 may result in:
- Reduced placing- and compacting efforts
  - Shorter drying time
  - Improved shrinkage and creep behavior
  - Higher strength adjustable
  - Reduced water consumption and less waste water
  - Reduced energy consumption and CO<sup>2</sup>-emission
  - Increased production rate and thus enlarged capacity

### PRODUCT INFORMATION

<b>Composition</b>	Aqueous solution of modified polycarboxylate polymers
<b>Packaging</b>	IBC of 1'000 kg net Bulk supply on demand
<b>Appearance / Colour</b>	Milky white to yellowish liquid
<b>Shelf life</b>	12 months from date of production, if stored properly in undamaged, unopened, original sealed packaging.
<b>Storage conditions</b>	In dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight, frost and contamination.
<b>Density</b>	Approx. 1.06 g/cm <sup>3</sup>
<b>pH-Value</b>	Approx. 5.3 at +23°C

## APPLICATION INFORMATION

<b>Recommended Dosage</b>	Dosage range for typical applications: 0.07 - 0.9 % by weight of binder. Note: Differences in calcium sulphate binder type, raw material sources, calcining methods, age and storage conditions of the binder and other individual parameters at the plant and/or job site can influence the superplasticizer consumption of gypsum based binders. At high dosage and at low temperatures, Sika® ViscoCrete® G-5 can also cause retardation. Preliminary testing is required to determine the exact dosage for your specific conditions. Please contact our Technical Service Department for more information and assistance.
<b>Compatibility</b>	Sika® ViscoCrete® G-5 may be combined with most commonly used gypsum additives, like foaming agents, accelerators and retarders. In these combinations i.e. with Retardan® additional improvements in flow and retardation may also be achieved. Important: Always conduct trials before combining products in specific mix designs and contact our Technical Services Department for any additional information and advice concerning specific combinations with other products.
<b>Dispensing</b>	Sika® ViscoCrete® G-5 is added to the gauging water or added with it into the mixer.

## 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.

## 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 found on the Internet at [www.sika.de](http://www.sika.de).

## 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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