

# PRODUCT DATA SHEET

# Sika® ViscoCrete® G-2

# High-Performance Superplasticizer/ HRWR

# **DESCRIPTION**

Sika® ViscoCrete® G-2 is a high-performance superplasticizer and water reducer based on Sika® ViscoCrete® polycarboxylate polymer technology.

#### **USES**

Sika® ViscoCrete® G-2 is formulated for applications in systems with high calcium sulfate content or pure gypsum binders.

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

- Gypsum boards (also: plasterboards, wallboards), partition panels, ceiling tiles
- Gypsum fiberboards, building elements, blocks
- Building plaster, render, stucco, bonding/filling compound, molding plaster, dental and medical plaster

# **CHARACTERISTICS / ADVANTAGES**

Sika® ViscoCrete® 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-2 include, but are

The benefits of Sika® ViscoCrete® G-2 include, but are not limited to the following:

- High water reduction
- Excellent flowability
- Rapid adsorption
- Very low retardation
- Compatible with other additives
- Free of formaldehyde and ammonia

Especially when utilized for gypsum board production the use of Sika® ViscoCrete® G-2 may result in:

- Short mixing time
- 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<sub>2</sub>-emission
- Increased production rate and thus enlarged capacity

### PRODUCT INFORMATION

Composition	Aqueous solution of modified polycarboxylates
Packaging	IBC of 1000 kg net Bulk supply on demand
Appearance / Colour	Light yellowish liquid
Shelf life	12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging.
Storage conditions	Storage at temperatures between 5 °C and 30 °C. Protect from direct sunlight, frost and contamination.
Density	~1.10 kg/L
pH-Value	~4.0 at +20 °C

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Conventional Dry Material Content	~40.0 M%
Viscosity	~150 mPa·s at +20°C
Total Chloride Ion Content	≤ 0.1 %
Equivalent Sodium Oxide	≤ 2.0 %

# **TECHNICAL INFORMATION**

Specific Advice	Differences in calcium sulfate 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 binders. At high dosage bleeding and/or segregation may occur as well as retardation of setting.
	<ul> <li>Note:</li> <li>Preliminary testing is required to determine the exact dosage for your specific conditions. Please contact sika technical service for more information and advice.</li> </ul>

# **APPLICATION INFORMATION**

Recommended Dosage	Dosage range for typical applications: 0.05 - 0.8 % by weight of binder.
Compatibility	Sika® ViscoCrete® G-2 may be combined with many other Sika products as well as with most commonly used gypsum additives, like foaming agents, accelerators and retarders. In combination i.e. with Retardan(R) improvements in flowability and setting-time adjustment may be achieved.  Note:  Always conduct trials before combining products in specific mixes and contact Sika technical service for information about specific combinations with Sika products.
Dispensing	Sika® ViscoCrete® G-2 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.



#### **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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