

Sika® ViscoCrete® -425 P

High-performance superplasticizer

Product Description

Sika® ViscoCrete® -425 P is a high-performance superplasticizer and water reducer in powder form, based on Sika® ViscoCrete® polycarboxylate (PCE) polymer technology.

Uses

Sika® ViscoCrete® -425 P is formulated for use in dry mortar applications in particular with high calcium sulphate content or pure gypsum systems. Furthermore the product has a very good performance in cement based binder systems.

Sika® ViscoCrete® -425 P is especially suitable for the following dry mortar applications:

- self-levelling calcium sulphate screeds (SLS)
- levelling compounds on calcium sulphate basis (SLU)
- moulding plasters
- Grouts (including non-shrink grouts) & tile adhesives based on Portland cement (OPC).
- ternary blended binder systems

Characteristics / Advantages

Sika® ViscoCrete® -425 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 characteristics and advantages of Sika® ViscoCrete® -425 P include:

- High water reduction at low dosage (resulting in shorter drying times, higher densities and strengths)
- Very good flow and self-levelling behaviour
- Self-compacting behaviour
- Increased strengths development
- Improved shrinkage and creep behaviour
- Reduced mixing times due to fast adsorption
- Long-term stability which enables medium to long slump life
- Compatible with other additives (e.g. citric acid)
- Low influence on hydration, thus low activator/accelerator consumption
- Efficiency over a wide pH-range, also in alkaline conditions
- Free of formaldehyde and ammonia

Approval / Standards

Confirms to EN 934-2, tab. 3.1/3.2 (superplasticizer)

Product Data

Appearance / Colour

White powder

Chemical Base

Modified polycarboxylate polymer (PCE)

Density (DIN 1060)

Bulk density: $0.6 \pm 0.1 \text{ g/cm}^3$

pH Value

4.0 ± 0.5 at $+23^\circ\text{C}$ (40% solution)

Alkali content

$\leq 2.0 \%$ (Na_2O -equiv.)



Total Chloride Ion Content	≤ 0.1
Packaging	20 kg bags / 800 kg per pallet
Storage	Dry storage at temperatures up to 30°C. Protect from direct sunlight. 24 months shelf life from date of production, if stored properly in undamaged, unopened, original sealed packaging.
Processing	
Consumption / Dosage	Depending on the application the dosage rate of Sika® ViscoCrete®-425 P varies from 0.05 to 0.5% of the powder weight. At high dosage and at low temperatures Sika® ViscoCrete®-425 P can also cause retardation.
Dispensing / Mixing	Sika® ViscoCrete®-425 P is added to the dry mix. For optimum utilisation of the high water reduction capability, a minimum wet mixing time of 30 seconds is recommended for the mortar before use.
Compatibility	Sika® ViscoCrete®-425 P may be combined with many other Sika® Products as well as with most existing accelerators, retarders and other additives used in dry-mortar applications. In these combinations with Sika® ViscoCrete®-425 P, 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.
Important Notes	
Value Base	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.
Health, Safety and Environment Information	Product code BZM 1 For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet 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.



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