

PRODUCT DATA SHEET

Sika® ViscoCrete®-5030

High Range Water Reducing Superplasticizer

DESCRIPTION

Sika® ViscoCrete®-5030 is a high performance superplasticizer for concrete and mortar. It meets the requirements for high range water reducing superplasticizers according to EN 934-2.

USES

Sika® ViscoCrete®-5030 is especially suitable for the production of concrete mixes which require high early strength development, powerful water reduction and improved flowability.

Sika® ViscoCrete®-5030 is mainly used for the following applications:

- Precast concrete
- In situ concrete requiring fast stripping times
- Self-Compacting Concrete (SCC)
- Tunnel segment concrete

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-5030 as a powerful superplasticizer acts through several different mechanisms including surface adsorption and sterical effects separating the binder particles. The following advantageous properties are achieved:

- Increase in the early strength development, resulting in very economic stripping times for precast and in situ concrete
- Extremely powerful water reduction, resulting in high density, high strength and reduced permeability for water etc.
- Superior plasticizing effect, resulting in improved flowability, placing and compacting behaviour
- Suitable for the production of Self Compacting Concrete (SCC)
- Sika® ViscoCrete®-5030 has no ingredients which promote the corrosion of steel. Therefore it is suitable for use in reinforced and prestressed concrete structures

APPROVALS / STANDARDS

Conforms to the requirements of EN 934 - 2, Table 3.1

Certificate of Conformity of the Factory Production Control Nr. 1327-CPR-1032 (13.12.2014).

PRODUCT INFORMATION

| Chemical Base | Aqueous solution of modified polycarboxylates | |
|-----------------------------------|--|------------|
| Packaging | 1100 kg IBC's. | |
| Appearance / Colour | Light brownish liquid | |
| Shelf Life | 12 months from date of production | |
| Storage Conditions | Store in original, unopened packaging, at temperatures between +5°C and +30°C. Protect from direct sunlight and frost. | |
| Density | 1.07 ± 0.2 kg/l | (at +20°C) |
| pH-Value | 6.5 ± 1 | |
| Conventional Dry Material Content | 31.0 ± 1 % by weight | |
| Viscosity | Low viscosity liquid | |
| Total Chloride Ion Content | ≤ 0.2 % by weight | |
| Equivalent Sodium Oxide | ≤ 0.8 % by weight | |

| Concreting Guidance | The standard rules of good concreting practice, concerning production and placing, have to be followed. Laboratory trials shall be carried out before concreting on site, especially |
|---------------------|---|
| | when using a new mix design or producing new concrete components. • Fresh concrete must be cured properly and curing applied as early as possible. |

APPLICATION INFORMATION

| Recommended Dosage | For medium workability: 0.3 - 1.5% by weight of cement. For concrete of high workability, very low water/cement ratio and for Self Compacting Concrete: 1.0 - 2.0% by weight of cement. | |
|--------------------|--|--|
| Compatibility | Sika® ViscoCrete®-5030 may be combined with many other Sika Products. | |
| Restrictions | Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations. | |



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.

LIMITATIONS

When using Sika® ViscoCrete®-5030 a suitable mix design has to be taken into account and local material sources shall be tested.

Sika® ViscoCrete®-5030 shall not be added to dry cement.

Excessive water addition or overdosing may cause bleeding or segregation.

Self Compacting Concrete:

When using Sika® ViscoCrete®-5030 to produce Self Compacting Concrete, suitable mix design have to be used

Frost:

If frozen and/or if precipitation has occurred, Sika® ViscoCrete®-5030 may be used after thawing slowly at room temperature and intensive mixing.

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.

APPLICATION INSTRUCTIONS

- Sika® ViscoCrete®-5030 is added to the gauging water or added with it into the concrete mixer.
- To take advantage of the high water reduction, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended.
- To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time
- Clean all tools and application equipment with water immediately after use.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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