

PRODUCT DATA SHEET

Sika® ViscoCrete®-320 U

HIGH PERFORMANCE SUPERPLASTICISER WITH ACCELERATION EFFECT CONCRETE ADMIXTURE

DESCRIPTION

Sika® ViscoCrete®-320 U is a third generation superplasticiser with hardening acceleration effect for concrete and Mortar. Sika® ViscoCrete®-320 U, meets the requirements of EN 934 - 2 and ASTM C 494 Type F.

USES

Sika® ViscoCrete®-320 U, is especially suitable for the production of concrete mixes which require high early strength development, excellent flowability, powerful water reduction and accelerating. Sika® ViscoCrete®-320 U, is mainly used for the following applications:

- Precast concrete
- Fast track concrete
- In situ concrete requiring fast stripping time
- Self Compacting Concrete (SCC)

FEATURES

Sika® ViscoCrete®- 320 U, as a powerful superplasticiser acts by different mechanisms. Through surface adsorption and sterical effects separating the binder particles the following properties are achieved:

- Pronounced increase in the early strength development, resulting in very economical stripping times for precast and in situ concrete
 - Extremely powerful water reduction, resulting in high density, high strength and reduced permeability for water, etc.
 - Excellent plasticising effect, resulting in improved flowability, placing and compacting behaviour
 - Reduced energy cost for steam cured precast elements
 - Especially suitable for the production of SCC
 - Improved shrinkage and creep behaviour
 - Reduced closure times for repairs of roads and runways
- Sika® ViscoCrete®- 320 U, does not contain chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and prestressed steel.

PRODUCT INFORMATION

Composition	Aqueous solution of modified polycarboxylates
Packaging	1000 liters IBC
Appearance and colour	Brownish liquid
Shelf life	12 months if stored properly in original unopened packaging.
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperatures between +5°C and +35
Density	1.07 ± 0.02 kg/litre.(at 25 °C)
pH-Value	7.5 ± 1 (at 25 °C)

TECHNICAL INFORMATION

Concreting guidance

Concrete placing: With the use of Sika®ViscoCrete®-320 U, concrete of highest quality is being produced, however state of the art concrete technology, such as mixing, placing vibrating and curing must be respected and applied. Curing: Effective measures for concrete curing must be followed.

Specific advice

Sika®ViscoCrete®-320 U, is added to the gauging water prior to its addition to the dry mix or added separately to the wetted concrete mix. For optimum utilization of the ultra-high range water reducer we recommend a minimum wet mixing time of 60 seconds. When adding the balance of the batching water to adjust concrete consistency this should be done after a minimum of 2/3 of the wet mixing time to avoid surplus water in the concrete.

APPLICATION INFORMATION

Recommended dosage

For medium workability: 0.7 – 1.2 % by weight of cement For concrete with high workability, very low water/cement ratio and for SCC : 1.0 – 2.0 % by weight of cement

Compatibility

Sika®ViscoCrete®-320 U, may be combined with many other Sika products. Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations

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.

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.

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 exact product data and uses.

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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PRODUCT DATA SHEET

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