

PRODUCT DATA SHEET

Sika® ViscoCrete®-90 HE

HIGH PERFORMANCE SUPERPLASTICIZER / HIGH EARLY STRENGTH

DESCRIPTION

Sika® ViscoCrete®-90 HE is a third generation superplasticizer for precast concrete industry, high performance concrete (HPC) and self compacting concrete (SCC).

USES

Sika® ViscoCrete®-90 HE is especially suitable for the production of concrete mixes which require high early strength development, powerful water reduction and excellent flow characteristics.

Sika® ViscoCrete®-90 HE 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®-90 HE, as a powerful superplasticizer, acts by different mechanisms.

PRODUCT INFORMATION

Composition	Aqueous solution of polycarboxylates
Packaging	Product is packaged in 5kg and 20kg container / 200kg Drum / 1000kg IBC
Appearance and colour	Pale yellow/Light Brown Liquid
Shelf life	12 months from production date if stored properly in original, unopened packaging.
Storage conditions	Store in a dry area between 5°C and 35°C, protected from direct sunlight.
Density	1.066 ± 0.01 kg/ L
pH-Value	5.7 ± 1.0

APPLICATION INFORMATION

Through surface adsorption and sterical effects separating the binder particles, the following properties are achieved:

- Pronounced increase in the early strength development;
- Extremely powerful water reduction;
- Excellent plasticizing effect;
- Reduced energy cost for steam cured precast elements;
- Especially suitable for the production of Self Compacting Concrete (SCC);
- Improved shrinkage and creep behavior;
- Reduced closure times for repairs of roads and runways.

Sika® ViscoCrete®-90 HE does not contain chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and pre-stressed steel.

CERTIFICATES AND TEST REPORTS

Conforms to the requirements of EN 934 – 2

Recommended dosage	0.2 to 2.0% on the weight of binders (cement and additives, if any); These dosages are orientative, being essential to perform laboratory and field tests to determine the optimum dosage. The optimum dosage should be determined by experimental tests with the mix and the materials of the job site which may be outside the indicative range.
Compatibility	Sika® ViscoCrete®-90 HE is compatible with other Sika admixtures. It is suggested that you contact the Sika Technical Department for more information.

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.

FURTHER DOCUMENTATION

In cases of overdosing the concrete may have: strong exudation, segregation and excessive delay, which may lead to non-hardening of the concrete or loss of strength.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains 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.