

PRODUCT DATA SHEET

Sika® ViscoCrete®-10

HRWR – High Range Water Reducer with retardation effect

DESCRIPTION

Sika® ViscoCrete®-10 is a third generation superplasticiser for concrete and mortar.

USES

Sika® ViscoCrete®-10 is mainly used for the following applications:

- Concrete with ultra high water reduction (up to 20%) and improved flow
- High performance concrete
- Concrete in hot weather and with extended transportation and workability requirements

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-10 is a powerful superplasticiser which acts through several different mechanisms including surface adsorption and sterical effects separating the cementitious binder particles. The following advantageous properties are achieved:

- High water reduction, resulting in high density, high strength and reduced permeability
- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics
- Reduced shrinkage during curing and reduced creep when hardened
- Suitable for use in reinforced and prestressed concrete structures.

APPROVALS / CERTIFICATES

Sika® ViscoCrete® 10 meets and exceeds all requirements of Australian Standard 1478.1-2000 for High Range Water Reducer Retarder Admixture (HRWRRe).

PRODUCT INFORMATION

Composition	Modified polycarboxylate in water.
Packaging	5 litres, 25 litres, 200 litres, and 1000 litres containers
Appearance / Colour	Light brownish liquid
Shelf life	12 months from date of production if stored properly without interference.
Storage conditions	In dry conditions at temperatures between +5°C and +30°C. Protect from direct sunlight and frost.
Density	Density: 1.06 kg/l (at +20°C) approx
pH-Value	4.3 ± 0.5
Total chloride ion content	≤ 0.1 %

TECHNICAL INFORMATION

The standard rules of good concreting practice, concerning production and placing, are 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	Recommended dosage for concrete: 0.4 - 1.5% by weight of cement.
Compatibility	Sika® ViscoCrete® can be used in conjunction with all the admixtures manufactured by Sika Kenya Limited with the exclusion of Sikament® NNG. All admixtures must be added separately. For additional information, please contact Sika technical personnel. Note: Always conduct trials before combining products in specific mixes.

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.

IMPORTANT CONSIDERATIONS

When using Sika® ViscoCrete®-10 a suitable mix design has to be taken into account and local material sources shall be trialled.

Sika® ViscoCrete®-10 shall not be added to dry cement.

Do not use with naphthalene based admixtures. Excessive water addition or overdosing may cause bleeding or segregation.

Self Compacting Concrete:

When using Sika® ViscoCrete®-10 to produce self compacting concrete, suitable mix designs have to be used.

Frost:

If frozen and/or if precipitation has occurred, Sika® ViscoCrete®-10 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.

DISPENSING

Sika® ViscoCrete®-10 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 per cubic metre after the admixture addition is recommended.

To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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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Product Data Sheet

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