

Sika ViscoCrete® -10

Concrete Admixture

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| Product Description | Sika ViscoCrete® -10 is a fourth generation super plasticizer for concrete and mortar. It meets the requirements for super plasticizers according to SIA 162 (1989) prEN 934-2 and ASTM-C-494 Types G and F . |
| Uses | <p>Sika ViscoCrete® -10 is suitable for production of concrete.</p> <p>Sika ViscoCrete® -10 facilitates extreme water reduction, excellent flowability at the same time optimal cohesion and highest self compacting behaviour.</p> <p>Sika ViscoCrete® -10 is mainly used for the following applications:</p> <ul style="list-style-type: none"> ■ Pre-cast Concrete ■ Ready mix concretes. ■ Concrete with highest water reduction (Up to 30%). ■ High strength concrete. ■ Hot weather concrete. ■ Self Compacting Concrete (SCC) <p>High water reduction, excellent flowability, coupled with high early strengths, have a positive influence on the above mentioned applications.</p> |
| Characteristics / Advantages | <p>Sika ViscoCrete® -10 acts by different mechanisms. Through surface adsorption and sterical separation effect on the cement particles, In parallel to the hydration process, the following properties are obtained:</p> <ul style="list-style-type: none"> ■ Strong self compacting behaviour. Therefore suitable for the production of self compacting concrete. ■ Increase high early strengths development, ■ Extremely powerful water reduction (resulting in high density and strengths). ■ Excellent flowability (resulting in highly reduced placing and compacting efforts). ■ Reduced energy cost for steam cured precast elements. ■ Improved shrinkage and creep behaviour. ■ Reduced rate of carbonation of the concrete. ■ Improved Water Impermeability. <p>Sika ViscoCrete® -10 does not contain chloride or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable to be used without any restrictions for reinforced and prestressed concrete production.</p> |
| Technical Data | |
| Base | Aqueous solution of modified Polycarboxylates |
| Appearance / Colour | Turbid liquid |
| Density | 1.08 kg/lit. ± 0.005 |
| Packaging | 5 and 20 kg pails 200 kg drums Bulk Tanks packing available upon request |
| Storage / Shelf Life | 12 months from date of production if stored properly in unopened and undamaged, original sealed packaging, in dry temperatures between +5°C and +35°C. Protected from direct sunlight and frost. |



Application Details

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| Dosage / consumption | <p>Recommended dosage</p> <ul style="list-style-type: none"> ■ For medium workability: 0.2 – 0.8% litre by weight of cement ■ For flowing and self compaction concrete (S.C.C.) 0.3 – 2 % litre by weight of cement. |
| Addition | <p>Sika ViscoCrete® -10 is added to the gauging water or simultaneously with it poured into the concrete mixer. For optimum utilisation of the high water reduction we recommend through mixing at a minimal wet mixing time of 60 seconds.</p> <p>The addition of the remaining gauging water – to fine tune concrete consistency – may only be started after 2/3 of wet mixing time, to avoid surplus water in the concrete.</p> |
| Concrete Placing | <p>With the use of Sika ViscoCrete® -10 concrete of highest quality is being produced. The standard rules of good concreting practice (production as well as placing) must also be observed with Sika ViscoCrete® -10 concrete.</p> <p>Fresh concrete must be cured properly.</p> |
| Compatibility | <p>Sika ViscoCrete® -10 may be combined with following Sika products:</p> <ul style="list-style-type: none"> - Sika Pump® - Sika® Ferrogard® -901 - Sikafume® - SikaRapid® - Sika Retader® <p>Pre-trials trials are recommended if combinations with the above products are being made. Please consult our technical service.</p> |
| Important Flowing concrete S.C.C | <p>Sika ViscoCrete® -10 is also used to produce flowing and self compacting concrete (S.C.C) For these, special mix designs are required, contact out Technical Service division.</p> |
| Safety Instructions | |
| Safety Precautions | <p>In contact with skin, wash off with soap and water.</p> <p>In contact with eyes or mucous membrane, rinse immediately with clean warm water and seek medical attention without delay.</p> |
| Ecology | <p>Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.</p> |
| Transport | <p>Non-hazardous</p> |
| Toxicity | <p>Non-Toxic under relevant health and safety codes.</p> |
| Legal notes | <p>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.</p> |

