

Sika ViscoCrete[®] 5-500

HWR – High Range Water Reducer

Construction

Description	Sika ViscoCrete [®] 5-500 is a third generation superplasticiser used to produce soft plastic concrete as well as state of the art, self compacting concrete (S.C.C) depending on the dose rate.
Uses	<p>Sika ViscoCrete[®]5-500 is ideal for the production of high performance concrete. It facilitates extremely high water reduction or highly flowable concrete for easy placement.</p> <p>Sika ViscoCrete[®]5-500 is used for the following types of concrete:</p> <ul style="list-style-type: none"> • Precast concrete • Concrete requiring high water reduction • High strength concrete • Self compacting concrete (S.C.C)
Advantages	<p>When using Sika ViscoCrete[®]5-500, the following concrete properties are obtained (due to surface absorption as well as separation of the cement particles):</p> <ul style="list-style-type: none"> • High workability, flowability and finishability • Extremely high water reduction can be achieved, resulting in high early strength concrete. • Improved shrinkage and creep behaviour can be observed. • Excellent flow can also be achieved resulting in better placement and compaction of the concrete. • Suitable for the production of Self Compacting Concrete or super workable concrete.
Storage and Shelf life	Stored at temperatures between 5°C and 35°C in unopened original containers, protected from direct sunlight and frost, shelf life is at least one (1) year. Requires recirculation when held in storage for extended periods.
Instructions for Use	
Dosage	Typical dosage for soft concrete production is 300mls-600mls per 100kg of total cementitious material. For self compacting concrete, typical dosage is 700mls-1000mls per 100kg of total cementitious material.
Mixing	<p>Charge materials and approximately 70% of the mixing water. Mix to allow the cement to wet out sufficiently. Sika[®] ViscoCrete[®] 5-500 is then added together with the remaining batching water. For optimum utilisation of the high range water reduction we recommend thorough mixing at a minimum wet mixing time of 60 seconds per cubic metre after the admixture addition.</p> <p>The addition of the remaining gauging water, to fine tune concrete consistency should only be started after 2/3 of the wet mixing time after the admixture addition, to avoid surplus water in the concrete.</p>
Specification Type	<p>Sika ViscoCrete[®] 5-500 meets and exceeds all requirements of Australian Standard 1478.1-2000 for High Range Water Reducing Admixture (HWR).</p> <p>Queensland Government Department of Main Roads approved.</p>

Technical and Physical Data

Form	Mixture of modified polycarboxylates
Colour	Clear brown
Density (20°C)	1.07 kg/litre approx.
pH Value (20°C)	5 ± 1.0
Chloride Content	No added chlorides
TEA Content	Does not contain triethanolamine
Air Entrainment	May slightly increase air content of concrete at normal dose
Packaging	20 litre pail 205 litre drum Bulk deliveries

Important Note

- When using Sika ViscoCrete® 5-500 actual setting time will depend on site conditions. This should be checked and predetermined with trial mixes.
- Must be recirculated in bulk, or when held for extended periods in smaller containers.
- Special mix designs are required to achieve Self Compacting Concrete (S.C.C)
- Do not mix with **naphthalene** based admixtures.
- Please check compatibility when using with other admixtures.
- For additional information, please contact your local Sika Representative.

Handling Precautions

- Avoid contact with eyes and skin.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water and seek medical attention immediately.
- A full Material Safety Data Sheet is available from Sika on request.

Important Notification

The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

Construction

