

Sika Viscocrete® HE-500

Ultra High Range Water Reducer with hardening acceleration effect Concrete Admixture.

Description	<p>Sika Viscocrete HE-500 is a 3rd generation polymer based high performance superplasticizer with hardening acceleration effect for concrete.</p> <p>Sika Viscocrete HE-500 increases the development of concrete early strength.</p> <p>Sika Viscocrete®HE-500 meets requirement of ASTM C494 type F</p>
Uses	<p>Sika Viscocrete HE-500 is mainly suitable for the manufacture of concrete in precast factories.</p> <p>Sika Viscocrete HE-500 excels by its extremely high water reduction capacity, providing good flowability while retaining optimal cohesion of the mix.</p> <p>Sika Viscocrete HE-500 is used for the following types of concrete:</p> <ul style="list-style-type: none"> ■ High-strength/High performance concrete in precast industry. ■ Concrete with extreme water reduction ■ Self-Compacting-Concrete in precast industry.
Advantages	<p>Sika Viscocrete HE-500 combines different modes of actions. By adsorption on the surface of the fines and keeping them apart while the hydration is in progress, Sika Viscocrete HE-500 effects the following concrete properties:</p> <ul style="list-style-type: none"> ■ Extremely high water reduction (Producing high impermeability and strengths) ■ High flowability (considerably reduced placing and compacting work) ■ Faster evolution of early strength development. ■ Workability is set to 30-40 minutes (still depends on cement type, temperature) ■ Highly improved waterproofness. ■ Improved creep and shrinkage resistance characteristics. <p>Sika Viscocrete HE-500 contains neither chlorides nor other corrosion-inducing substances and can therefore be used without any restrictions for reinforced and prestressed concrete structures.</p>
Product Data	
Form/Colour	Liquid/brownish colour
Packaging	5 / 25 / 200 litres drum
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +30 °C.
Shelf-life	12 months if stored properly in original unopened packaging



Technical Data

Base	Modified polycarboxylate polymers
Specific gravity	1.070-1.100
pH Value	4.65-6.50

Application Details

Dosage	0.50-2.0 ltr. per 100 kg of cement
Typical Dosage	For soft/plastic concrete 0.5-0.8 ltr per 100 kg of cement For SCC concrete: 0.9-1.8 ltr. per 100 kg of cement.
Compatibility	Sika Viscocrete HE 500 may be combined with all Sikament, Sika Aer, Sika Pump, Sikacrete PP1 products, but must be added separately to the mix and not pre-mixed prior its addition. Sika Viscocrete HE 500 is compatible with all Portland Cement types.
Addition/Mixing	Sika Viscocrete HE 500 is added to the gauging water prior to its addition to the dry mix or added separately to the wetted concrete mix. For optimum utilisation 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.
Concrete Placing	With the use of Sika Viscocrete HE500, 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.
Note on application/ Limits	Overdosing will result in increased workability and setting time of the concrete; however provided that curing is effective, ultimate concrete strength and properties will not be affected. Accurate dispensing equipment can be supplied by Sika Limited (Vietnam) Use an appropriate concrete mixer and do not mix by hand. Trial mixes are recommended to establish exact dosage rates required to suit individual requirements. Please contact Sika Technical Department for further assistance.
Curing	Effective measures for concrete curing must be followed. Use of Sika curing compounds is advisable. Sika Viscocrete HE500 is suitable for concrete to be steam cured.

Health and Safety Information

Protective Measures	Avoid prolonged contact with skin. Wash off thoroughly with soap water. In case of contact with eyes or mouth, rinse immediately with clean warm water and seek medical attention without delay. Avoid contact with food stuff and utensils
Ecology/ Waste disposal	Do not dispose of into water or soil, but according to local regulations.
Transportation class	Non-hazardous (according to local law)
Toxicity	Non-toxic

Disclaimer

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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