

Sika Control® -40

Shrinkage Reducing Concrete Admixture

Product Description Sika Control® -40 is a shrinkage reducing admixture to minimize drying shrinkage. The product meets the requirements for a concrete admixture according to SIA 162 without unwanted side effects to the concrete quality.

Uses Sika Control® -40 is especially suitable for the production of high performance concrete with greatly reduced drying shrinkage behaviour.
Thus, the durability of the structure is substantially extended. Sika Control® -40 is used for all structures where the requirements for the limitation of crack widths according to SIA 162 333 are specified.

Advantages Sika Control® -40 improves cohesion in the pore space. Contraction and therefore length change due to water loss is thus substantially reduced.

The following advantages may be obtained when using Sika Control® -40:

- Greatly reduces drying shrinkage (reduction of approx. 40%. strongly depending on mix design).
- Unchanged fresh and hardened concrete properties.
- Can be combined with air entraining agent for the production of frost and deicing salt resistant concrete.
- Substantially improved impermeability.

Sika Control® -40 does not contain chlorides or other steel corrosion promoting constituents. It may therefore be used with confidence for reinforced and prestressed concrete structures.

Technical Data

Base Hydroxy combinations

Appearance / Colour Brownish liquid

Density 1.0 kg/l (ASTM C-494)

pH-Value 10.5 ± 0.5

Packaging 180 kg drums
Bulk Tanks packing available upon request

Storage Conditions / Shelf life 12 months from date of production, if stored properly in unopened and undamaged original sealed packaging, at temperatures between +5°C and + 35°C. Protected from direct sunlight and frost.

Application

Dosage Recommended dosage 0.5 - 2.0 % by weight of cement

Addition Sika Control® -40 is added to the gauging water or poured into the concrete mixer simultaneously with it.

It may also be added into the transit mixer at the place of discharge. In this case an additional mixing time of at least one minute must be observed and the concrete visually checked for uniform consistency.



Concrete Placing	<p>With the use of Sika Control® -40 concrete of highest quality is being produced.</p> <p>The standard rules of good concreting practice, concerning production as well as placing, are to be followed.</p> <p>Fresh concrete must be cured properly.</p>
Comptability	<p>Sika Control® -40 may be usefully combined with the following Sika products:</p> <ul style="list-style-type: none"> ■ Sikament / ViscoCrete ■ SikaFume / SikaCrete ■ Sika Aer ■ Sika Retarder and Sika Retardol -25 <p>Pre-trials are recommended if combinations with the above products are being made. In combination with retarding admixtures greatly extended retardation time must be anticipated.</p>
Important Notes	<p><u>Frost and Deicing Salt Resistance:</u></p> <p>To Produce a high frost and deicing salt resistance according to SN 6450461 (BEI or BEII) standard, the air pore content in fresh concrete 0 - 32 mm should be 5 %. These air pores are normally introduced with Fro-V2-A.</p> <p><u>Retardation:</u></p> <p>Especially at low temperatures the use of Sika Control® -40 causes retardation. Depending on mix design one has to anticipate delayed demoulding. For high early strengths within 1-3 days Sikament HE-200 (accelerating superplasticizer) should be used.</p> <p><u>Frozen Sika Control® - 40:</u></p> <p>Frozen Sika Control® -40 may be used after it has been slowly thawed at room temperature and thoroughly mixed.</p>
Safety Instructions	
Safety Precautions	<p>Accidental splashes to the skin must be washed off with water and soap.</p> <p>Accidental splashes to the eyes or mucous membrane must be rinsed with clean warm water. Seek medical attention without delay.</p>
Ecology	<p>Residues of material must be removed according to local regulations.</p> <p>Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.</p>
Transport	Non-hazardous
Toxicity	Non-Toxic under relevant health and safety codes.
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>



Sika Egypt for Construction Chemicals
 El Abour City
 1st industrial zone (A)
 Section # 10 Block 13035,
 Egypt

Tel :+202- 44810580 - 90
 Fax :+202- 44810459
 Mob :+20122- 3908855
 www.sika.com.eg

