

Sika Lightcrete® -02

Lightweight Concrete Admixture

Product Description	<p>Sika Lightcrete® -02 is a liquid admixture for concrete and mortar to produce lightweight concrete.</p> <p>Foam concrete, e.g. for the filling of trenchers, lightweight concrete for thermal and acoustic insulation purposes, the filling of pipes etc, may be produced with the aid of Sika Lightcrete® -02 .</p> <p>Lightweight concrete (LB) classified according to SIA 162 can also be produced with Sika Lightcrete® -02.</p>
Uses	<p>Sika Lightcrete® -02 is suitable for the production of lightweight concrete for every kind of application. The liquid admixture is being added at the batching plant or directly onto the transit mixer. Its application is suitable for site mixed as well as ready mixed concrete.</p> <p>The key figures like density, air pore content or strengths depend on the composition of the aggregate, their partial replacement with lightweight aggregates, water content, binder content and mixing times.</p> <p>It is not possible to produce frost and de-icing salt resistant concrete with Sika Lightcrete® -02 .</p>
Advantages	<p>Sika Lightcrete® -02 produces the necessary quantity of airpores during the mixing process. No reactive air production takes place.</p> <p>The following advantages may be obtained when using Sika Lightcrete® -02 :</p> <ul style="list-style-type: none"> ■ Safe introduction of air pores up to 35%. ■ Dry density of approx. 800 up to 1'600 kg/m³ in combination with lightweight aggregates. ■ Stable air content also after placing of the concrete. ■ Conveyance of lightweight concrete with concrete pump possible. ■ Combinations with lightweight aggregates, e.g. expanded clay are possible. ■ Easy production of concrete and mortar in ready mix plants using standard dosing equipment. <p>Sika Lightcrete® -02 does not contain chlorides or other components which promote steel corrosion. It may therefore be used without any restrictions in steel-lightweight concrete construction.</p>
Technical Data	
Appearance / Colour	Brownish liquid
Density (20°C)	1.01 (ASTM C-494)
Packaging	<p>5 Kg and 20 Kg pails</p> <p>200 kg drums</p> <p>Bulk Tanks packing available upon request</p>
Storage Conditions / Shelf Life	12 months from date of production if stored properly In unopened and undamaged original sealed containers, at temperatures between + 5°C and + 35°C. Protected from direct sunlight and frost.



Application

Dosage

Recommended dosage (by weight of cement).

For classified lightweight concrete	0.5 - 1.0% in combination with sand and lightweight aggregates.
For lightweight (pore) concrete	0.5 - 2.0%

Addition

Sika Lightcrete® -02 is being added to the gauging water or added simultaneously together with the gauging water into the concrete mixer.

The mixing time necessary to achieve a specific density of fresh concrete depends on type of mixer used, aggregates and binder. Therefore trials to achieve certain airpore content are indicated. The results from these trials with regard to the mixing procedure should be strictly adhered to.

Sika Lightcrete® -02 may also be added to the pre-mixed concrete directly into the transit mixer at the point of discharge. An additional mixing time of at least 2 minutes per m3 concrete must be strictly observed. Before being discharged, the concrete must be tested for the intended density.

Concrete Placing

With the use of Sika Lightcrete® -02 lightweight or foam concrete may be produced. The standard rules of good concrete production and placing must also be observed for Sika Lightcrete® - 02 concrete.

Proper curing procedures must be observed for surfaces which are to be exposed to weathering. Otherwise, premature drying out close to the surface may cause lightweight concrete to lose mechanical strengths.

Important

Frozen Sika Lightcrete® -02 may be used without any loss of performance if it has been thawed slowly at room temperature (never directly over open flame) and stirred thoroughly.

Sika Lightcrete® -02 may be combined with the following Sika products:

- Sika Pump®.
- Sikament®
- Plastiment® / Plastocrete®.
- Sika retarded® and Sika Retardol® -25.

To adjust the required fresh concrete density and to determine mixing procedures and mixing times pre testing is necessary.

Safety Instructions

Safety Precautions

Accidental splashes to the skin must be washed off with water and soap.

In contact with eyes or mucous membrane rinse immediately and intensively with clean warm water and seek medical attention without delay.

Ecology

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.

Transport

Non-hazardous

Toxicity

Non-Toxic under relevant health and safety codes.

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.



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

Tel :+202- 4481 0580
 Fax :+202- 4481 0459
 Mob :+2012- 2390 8822/55
www.sika.com.eg

