

PRODUCT DATA SHEET

Sika® Sigunit®-111 LS KE

LIQUID SHOTCRETE ACCELERATING ADMIXTURE FOR THE WET SPRAY PROCESS

DESCRIPTION

Sika® Sigunit® -111 LS KE is a liquid cohesion agent and a rebound reducer for the wet spray method with momentary gluing effect. Suitable for use in hot and tropical climatic conditions.

USES

Sika® Sigunit® -111 LS KE is suitable for both dry and wet spraying processes and is used for :

- Rock, slope and trench stabilisation
- High quality lining shotcrete
- Producing an economical and high quality wet shotcrete.
- To produce permanent gunite and shotcrete elements
- To secure loose and fractured rock formations during mechanical or conventional tunnel construction
- To secure construction pits and sub-terranean excavations

CHARACTERISTICS / ADVANTAGES

Sika® Sigunit®-111 LS KE has the following characteristics and advantages:

- Produces increased internal cohesion and adhesion of shotcrete
- Significantly reduces the rebound of the gun mix
- Thick layers can be applied in one application
- Improves adhesion of the shotcrete to walls, rock formations and concrete and thus facilitates overhead application of shotcrete
- Results in dust reductions
- Makes it possible to produce a high strength and dense shotcrete

APPROVALS / CERTIFICATES

ASTM C 1141 Type II Grade 9 Class A

EN 934-5 and EFNARC European Specification for Sprayed Concrete

PRODUCT INFORMATION

Composition	Modified silicate
Packaging	25 Kg, 200 Kg, and 1000 KG (IBC)
Shelf life	12 months from date of production if stored in undamaged and unopened, original sealed containers. Note: Once containers are opened, use the material as quickly as possible
Storage conditions	<ul style="list-style-type: none"> ▪ Sika® Sigunit® -111 LS KE must be stored in its original containers. It has a reaction in air with atmospheric humidity [moisture] or rain etc., and must therefore always be stored in sealed containers. It should only be decanted into clean containers. ▪ Avoid mixing with air - filling through floor inlets or immersed pipes is best. Containers must always be properly sealed. Do not store in aluminium tanks. Protect from extreme cold.
Appearance / Colour	Viscous hazy liquid
Density	~1.38 kg/l at 25 °C

APPLICATION INFORMATION

Recommended dosage	The correct dosage must be determined by preliminary testing. For layer thicknesses of up to about 20 cm in one pass, dosage is between 3% and 7% by weight of binder. Actual dosage to be finalised on the basis of site trials.
Dispensing	Sika® Sigunit® -111 LS KE must be added with a gauging device suitable for the wet spray process. Skilled nozzle operation and thorough mixing within the concrete are essential.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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.

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