

PRODUCT DATA SHEET

SikaFiber® DL 45/35

The hooked end hard-drawn wire fibre

DESCRIPTION

SikaFiber® DL 45/35 is a hooked end hard- drawn wire fibre (loose), conforming to the provisions of ASTM A820, Type 1. SikaFiber® DL 45/35 is a steel fibre allowing for even dispersion through the matrix, ensuring no balling or pumping problems occur.

SikaFiber® DL 45/35 has an extensive history within the mining and construction industry and has been used in major tunneling and underground projects around the globe.

The use of steel fibre reinforced shotcrete out performs mesh reinforced shotcrete with improved crack resistance, ductility, energy absorption and impact resistance. Properly designed steel fibre reinforced shotcrete will reduce or eliminate cracking and allow for deformation with ductile stress redistribution.

USES

Steel Fibre reinforced shotcrete (SFRS) utilizing SikaFiber® DL 45/35 is typically used in such applications as:

- Ground Support
- Tunnel final linings
- Tunnel repairs
- Slope stabilization
- Retaining walls and soil nailing

CHARACTERISTICS / ADVANTAGES

- Allows shotcrete to follow the contours of the rock or ground, giving a consistent thickness, which provides a significant reduction in shotcrete consumption.
- The need to install mesh is eliminated and the decrease in time for which lifting equipment is needed results in reduction of cycle times and overall costs.
- Elimination of the difficult and dangerous job of installing mesh considerably increases safety on the work site.
- Increases the crack resistance, ductility, energy absorption and toughness of concrete.

PRODUCT INFORMATION

Packaging	20kg bags
Shelf Life	3 years from date of production
Storage Conditions	Stored undercover protected from the weather. Water soluble glue.
Length	35mm
Diameter	0.75mm (Aspect Ratio :45)
Tensile Strength	1210 MPa

APPLICATION INFORMATION

Recommended Dosage

Energy absorption (J) of plate of poured concrete C30/37, according to Efn-arc/SNCF:

Dosage	S25 (J)	Dosage	S25 (J)
20	800	35	1130
25	910	40	1210
30	1015		

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 (MSDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

MIXING

SikaFiber® DL 45/35 can be added to the mix at any stage during batching. Allow 3 to 5 minutes at mixing speed for fibres to disperse evenly throughout the matrix.

LOCAL RESTRICTIONS

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

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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