

Sigunit[®] L50 AF

Liquid Alkali Free Shotcrete Accelerator

Construction

Description	Sigunit [®] L50AF is a liquid alkali free accelerator for shotcrete in wet or dry form.
Uses	<p>Sigunit[®] L50AF is mainly used for:</p> <ul style="list-style-type: none"> ▪ Accelerated concrete in ground support applications. ▪ Securing rock in tunnel and mine construction. ▪ High quality shotcrete for general construction work.
Advantages	<ul style="list-style-type: none"> ▪ Minimal strength loss of the accelerated concrete if used correctly. ▪ No additional contamination of ground water to due washed-out alkalis. ▪ Large reduction in rebound. ▪ Improves bond of shotcrete to rock and concrete, making overhead spraying easier. ▪ Free of chlorides, no danger to steel reinforcement and steel fibres.
Shelf life	Stored in unopened, undamaged original containers in dry conditions, protected from direct influence of weather, (temperatures between 5°C and 35°C), shelf life is at least three (3) months.
Instructions for Use	<p>The effect of Sigunit[®] L50AF depends on cement content, age, type and substrate. It is also dependent on the temperature of the shotcrete and the application area and shotcrete methods used. The performance of the Sigunit[®] L50AF also significantly depends on:</p> <ul style="list-style-type: none"> • The w/c ratio of the basic concrete mix, in the wet spray process • The amount of water added during spraying, in the dry spray process
Dosage	The most effective dosage must be determined by trial. Generally, a dose rate range of 3% to 8% by weight of cement is recommended.
Addition	<p>Sigunit[®] L50AF is metered and added using a liquid dosage unit.</p> <p>Optimum dispersion in the shotcrete is governed by nozzle configuration and shotcreting techniques.</p>
Specification Type	Queensland Government Department of Main Roads approved.

Technical Data

Form	Mixture of special inorganic substances
Colour	Off white
Density (20°C)	1.40 kg/litre approx.
pH Value (20°C)	2.5 ± 0.5
Chloride Content	No added chlorides
TEA Content	Does not contain triethanolamine
Air Entrainment	Does not affect air content of shotcrete
Packaging	20 litre plastic pail 205 litre drum Bulk deliveries

Important Note

- The following Sika admixtures can be used in conjunction with Sigunit® L50AF
 - SikaTard 930
 - Sikament superplasticisers
 - SikaPump
 - Sika FerroGard
- The concrete temperature should not be lower than 15°C when shotcreting in thick layers (100mm and above).
- Use of Sigunit® L50AF requires the technically correct installation of dosing and conveying equipment.
- Metal components that come into direct contact with the products should be fabricated from stainless steel.
- Do not use non-ferrous metals such as, brass and copper.

Handling Precautions

- Avoid contact with skin and eyes.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water for at least 15 minutes and see a doctor.
- A full Material Safety Data Sheet is available from Sika on request.

Important Notification

The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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