

PRODUCT DATA SHEET

SikaGrind® BG-1

Efficient grinding aid, strength enhancer for the production of cement

DESCRIPTION

SikaGrind®-BG 1 is a chloride free liquid cement grinding aid with performance enhancing properties. SikaGrind®-BG1 has been specifically designed to increase the output of cement grinding plants and obtain improved early strength development for cements with high amount of clinker replacements.

USES

SikaGrind® BG-1 can be used in all cement types in order to:

- Increase productivity
- Improve the effectiveness of the mill and the separator
- Increase the final strengths of the cement

FEATURES

SikaGrind® BG-1 is a very efficient grinding agent that offers the following characteristics during cement production:

- Increased mill and separator efficiency, offering significant increase in production and energy conservation
- Reduction of the mill coating phenomenon in the internal parts of the mill (balls, jacket, diaphragm), maintaining it clean and in excellent conditions
- Optimization of cement granulometry, reducing the quantity of over-milled particles
- Activation of the clinker hydrate products, enhancing strength at all ages
- Reduction of blocking danger in the silos
- Due to its action as dispersive agent, reduces handling costs and handling time of the final product (pneumatic transport, charge/ discharge operations, bagging)

PRODUCT INFORMATION

Composition	Aqueous solution of amino alcohols
Packaging	1000 kg IBC
Shelf life	12 months from date of production
Storage conditions	Store properly in undamaged, unopened and sealed original containers, at temperatures between +5°C and +35°C. Protect from frost, direct sunlight and contamination. Note: When delivered in bulk, the tanks and equipment used must be free from contaminants.
Appearance and colour	Liquid, light brown
Density	~ 1.046 kg/l (at +20°C)

APPLICATION INFORMATION

Recommended dosage Typical dosage rates of SikaGrind® BG-1 are between 0.2-0.5 kg per tonne of cement (0.02% - 0.05% of total weight = cement clinker + additions).

The optimum dosage to achieve the desired characteristics shall be determined in Plant trials. Influencing factors are e.g. the properties of clinker source, type of cement and other plant variables. For consistent results, SikaGrind® BG-1 must be accurately dispensed.

Dispensing

SikaGrind®BG-1 shall be added onto the clinker feed shortly before the mill entrance or directly into the grinding mill (first or second compartment). Suitable dosage pumps with adjustable flow rates shall be used for accurate dosing. Note: Periodically, the end of the additive tube/hose shall be checked to ensure that it is not blocked.

Compatibility

Cements treated with SikaGrind® BG-1 are compatible in concretes produced with all commercial admixtures including air entrainers, water reducers, retarders and superplasticizers. The performance of concrete admixtures is not adversely affected by the use of SikaGrind® BG-1.

BASIS OF PRODUCT DATA

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

ECOLOGY, HEALTH AND SAFETY

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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.