

## PRODUCT DATA SHEET

# SikaGrind® SW 4321

(formerly MasterCem® SW 4321)

### CEMENT PERFORMANCE ENHANCER

#### DESCRIPTION

SikaGrind® SW 4321 is a composition of hydroxyl containing organic chemicals, polyamine and excited carboxylate base to improve the milling grindability and cement quality performance for the production of Portland and other hydraulic cement types. High end raw materials are used in order to guarantee a superior performance of the product.

#### USES

SikaGrind® SW 4321 is highly recommended for use on both the horizontal ball mill and vertical roller mill applications. The enhancing effect towards the cement quality is due to the promoted hydration reaction phase, better workability rheology and improved Particle Size Distribution structure.

#### FEATURES

SikaGrind® SW 4321 performs as a cement grinding aid and performance enhancer. These characteristics contribute to the following:

- Reduced cement agglomeration phenomenon for better grinding efficiency which directly act as an exceptional Pack Set Inhibitor at later stage especially during transfer or transport technically.
- Coating reduction – grinding media, internal liners, diaphragm, rollers, grinding table, separator internal parts, etc.
- Increased in cement compressive strength at all ages mainly towards the early stage.
- Increased in cement mill output at the same cement fineness up to 15% depending on the raw materials quality supplied. Directly influence the production cost per ton of cement produced.
- Better workability rheology for later application.

#### PRODUCT INFORMATION

|                           |  |
|---------------------------|--|
| <b>Composition</b>        | Aqueous solution of amines   |
| <b>Packaging</b>          | 1 000 Kg IBC (non-returnable)<br>1 000 Kg bulk delivery  |
| <b>Shelf life</b>         | 12 months from date of production if stored properly in undamaged, unopened, original sealed packaging.  |
| <b>Storage conditions</b> | Store at temperatures between +5 °C and +35 °C. Protect from frost, direct sunlight and contamination.<br>Note: When delivered in bulk, the tanks and equipment used must be free from contaminants. |
| <b>Appearance</b>         | Liquid   |

# APPLICATION INFORMATION

|                           |   |
|---------------------------|---|
| <b>Recommended dosage</b> | 300 – 500 ppm by weight of mill feed.<br>Individual dosage may vary due to different type of clinker, type of mill, desired results and job or task conditions. |
| <b>Compatibility</b>      | SikaGrind® SW 4321 is compatible with all types of cement. It complies with ASTM C465-19 as a non-harmful processing additive.                                  |

## 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

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### APPLICATION

SikaGrind® SW 4321 can be added at the clinker feed conveyor belt or directly into the cement mill's first compartment. A proper dosing pump is required to ensure the correct dosage into the cement for obtaining the optimum performance. Our technical supports are available to provide assistance in the use of SikaGrind® SW 4321 with the manual, automatic or computerized dispensing system.

## 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.

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