

**BUILDING TRUST** 

## PRODUCT DATA SHEET

# SikaGrind<sup>®</sup> ES 2285

(formerly MasterCem<sup>®</sup> ES 2285)

High Performance Early Strength Enhancer for Cements.

#### DESCRIPTION

SikaGrind<sup>®</sup> ES 2285 is a liquid cement additive with highly effective early strength enhancing properties and formulated with high-end raw materials to guarantee superior performance of the product. SikaGrind<sup>®</sup> ES 2285 conforms to ASTM C465-99 and does not affect to cement product process and EN 197-100.

#### USES

Apply to portland cement types and blend portland cement with limestone, fly ash and slag. Remarkable feature of SikaGrind® ES 2285 is to speed up reaction of cement particles and activated supplementary cementitious materials.

#### **CHARACTERISTICS / ADVANTAGES**

SikaGrind<sup>®</sup> ES 2285 improves significantly strength of cement, better than grinding aid or other tradditional products. It is effective catalyst for the early hydration of the cement particles and enhancing the reaction of  $C_3A$  and gypsum to improve the early strength of cement.

SikaGrind<sup>®</sup> ES 2285 performs as a grinding aid with many advantages as following:

- To increase productivity from 6% to 15% with the similar cement fineness.
- To reduce price of cement production by decreasing grinding costs and clinker usage coefficient.
- To increase early strength from 15% to 30%.
- To improve cement dry flowability.

#### **PRODUCT INFORMATION**

Chemical base	denatured alkanolamine solution.
Packaging	200/1000 liters. Bulk deliveries.
Shelf life	12 months if stored properly in original unopened packaging.
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperat- ures between +5 °C and +35 °C. <b>Note:</b> When delivered in bulk, the tanks and equipment used must be free from contaminants.
Appearance / Colour	Liquid/ dark brown color.
Density	1.21 - 1.25 kg/L (25°C).

#### **APPLICATION INFORMATION**

Recommended Dosage

Typical dosage rates of SikaGrind<sup>®</sup> ES 2285 are between 450 - 800 g/tonne of cement. The optimum dosage to achieve the desired characteristics shall be determined in plant trials. Influencing factors are e.g. the proper-

Product Data Sheet SikaGrind® ES 2285 April 2024, Version 01.01 021407000000002014 ties of clinker source, type of cement and other plant variables.<br/>Higher dosage can be applied to higher ratio of clinker replacement or<br/>low activity cement.<br/>For consistent results, SikaGrind® ES 2285 must be accurately dispensed.CompatibilitySikaGrind® ES 2285 is compatible with all types of cement.<br/>Cements treated with SikaGrind® ES 2285 are compatible in concretes pro-<br/>duced with all commercial admixtures including air entrainers, water redu-<br/>cers, retarders and superplasticizers. The performance of concrete admix-<br/>tures is not adversely affected by the use of SikaGrind® ES 2285.

#### **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

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.

#### 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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