

PRODUCT DATA SHEET

SikaGrind®-455 GNT

Grinding aid

PRODUCT DESCRIPTION

SikaGrind®-455 GNT is a cost effective grinding aid for portland cement and other hydraulic cements. SikaGrind®-455 GNT is non chloride based grinding aid. SikaGrind®-455 GNT improves the efficiency of the grinding process and can reduce the energy for grinding clinker. SikaGrind®-455 GNT meets requirements of ASTM C 465.

USES

SikaGrind®-455 GNT is a very effective dispersant providing:

- Neutralization of electrical charges on the surface of the cement particles.
- Separation of the cement particles.

CHARACTERISTICS / ADVANTAGES

SikaGrind®-455 GNT provides the following advantages in the cement production:

- Increased the production rate (tons per hour).
- Improved the grinding efficiency.
- Improved separator efficiency due to improved dispersion.
- Faster achievement of the desired cement fineness.
- Reduced particle fraction > 32 μ of the ground cement.
- Reduced re-agglomeration of the cement particles.
- Less accumulation of material on grinding equipment (grinding balls and mill).
- Reduce relative energy consumption per ton of cement.
- Easier handling and minimized problems with “plugging” due to improved flow characteristics.

SikaGrind®-455 GNT gives the following advantages to the finished cement:

- Reduced handling costs especially on pneumatic conveying systems.
- Easier discharge of the silos.
- Improved self-levelling of the cement in the silo.
- Improved cement granulometry (reduced quantity of “over-milled” particles).

PRODUCT INFORMATION

Packaging	SikaGrind®-455 GNT is available in tote and bulk packaging.
Appearance / Color	Clear to yellow liquid
Shelf Life	Shelf life when stored in dry warehouse conditions between 40 °F and 80 °F (5–27 °C) is 1 year.
Storage Conditions	SikaGrind®-455 GNT should be stored above 20 °F (-6 °C). Product pumping will become difficult in temperatures below 20 °F (-6 °C).

Protect from direct sunlight.

Specific Gravity

Approx: 1.160

APPLICATION INFORMATION

Recommended Dosage

The dosage rate of SikaGrind®-455 GNT will depend on desired characteristics of each cement. Dosage rates typically range from 0.02–0.08 % by weight of cement for Types I & II cements and from 0.03–0.09 % by weight of cement for Type III cements. The optimum dosage rate should be determined during full-scale cement mill tests. A trained Sika representative is available to assist in dosage calculations and mill test evaluations.

SikaGrind®-455 GNT should be dispensed as received. SikaGrind®-455 GNT must be accurately dispensed to ensure consistent results. Proper dispensing equipment with adjustable flow rates should be used for optimum performance.

SikaGrind®-455 GNT may be added onto the clinker conveyor belt or sprayed into the mills first compartment. A Sika representative is available to assist with recommendations on your mill system.

Note: The end of the dispensing tube/hose shall be checked and cleaned periodically to ensure it is not blocked and amount of grinding aid is added in proper dosage rates.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED

- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA’s Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or

replacement of this product exclusive of any labor costs.
NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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