

PRODUCT DATA SHEET

SikaGrout[®]-528 SF

High performance, cementitious grout with bleed resistance

PRODUCT DESCRIPTION

Non-shrink, non-metallic, cementitious grout with a unique two-stage shrinkage compensating mechanism. With a special blend of shrinkage-reducing and plasticizing/water-reducing agents, SikaGrout[®]-528 SF compensates for shrinkage in both the plastic and hardened states.

USES

- Use to grout and fill or repair voids in concrete
- Use for grouting tight clearances

PRODUCT INFORMATION

| | |
|---------------------------|---|
| Packaging | 50 lb (22.7 kg) bag |
| Appearance / Color | Gray powder |
| Shelf Life | 12 months from date of production if stored properly in original, unopened and undamaged sealed packaging |
| Storage Conditions | Store dry at 40–95 °F (4–35 °C) Protect from moisture. If damp, discard material. |

CHARACTERISTICS / ADVANTAGES

- Does not contain aluminum powder nor any components which generate hydrogen gas, carbon dioxide or oxygen.
- Enhanced with un-densified silica fume for low permeability
- Non-metallic, will not stain or rust
- Bleed resistant, even at high flow
- Low heat build-up
- Non-corrosive

TECHNICAL INFORMATION

| | | | |
|---|----------------------------------|-----------------------------|--|
| Compressive Strength | <u>1 day</u> | <u>2,000 psi (13.8 MPa)</u> | (ASTM C-109) |
| | <u>3 days</u> | <u>5,000 psi (34.5 MPa)</u> | |
| | <u>7 days</u> | <u>7,000 psi (48.3 MPa)</u> | |
| | <u>28 days</u> | <u>8,000 psi (55.2 MPa)</u> | |
| Shrinkage | <u>1 day</u> | <u>0.0 %</u> | (ASTM C-1090) 73 °F (23 °C) 50 % R.H. |
| | <u>28 days</u> | <u>0.0 to +0.2 %</u> | |
| Expansion | <u>3 hours</u> | <u>0.0 to +2.0 %</u> | (ASTM C-940) 73 °F (23 °C) 50 % R.H. |
| Bleeding | <u>4 hrs</u> | <u>0.0 %</u> | (ASTM C-940*) |
| * Modified per FL Dot Wick Induced Bleed Test | | | |
| Rapid Chloride Permeability | <u>< 2,500 C</u> | | (ASTM C-1202 AASHTO T-277) |
| Electrical Resistivity | <u>28 days</u> | <u>< 10,000 ohm.cm</u> | (ASTM C-1202) |
| Corrosion Test | <u>Time to corrosion control</u> | <u>344 hrs</u> | (Reference FL DOT Specification Section 938-6) |
| SikaGrout®-528 SF > 1,000 hrs. (Independent lab results available upon request) | | | |

APPLICATION INFORMATION

| | | | |
|--|---|------------------|---------------|
| Mixing Ratio | 11.5–12.5 pts (5.4–5.9 L) of water per bag Do not exceed 12.5 pints of water | | |
| Fresh Mortar Density | 125 lb/ft ³ | (ASTM C-138) | |
| Coverage | 0.48 ft ³ (0.01 m ³) per bag (Coverage figures do not include allowance for surface profile and porosity or material waste) | | |
| Layer Thickness | Min. 1/8" (3 mm) | | |
| Flowability | <u>After mixing</u> | <u>7–20 sec.</u> | (ASTM C-939*) |
| | <u>After 30 min.</u> | <u>7–20 sec.</u> | |
| * Modified per FL DOT Section 938 and PTI Section 4.4.5.2. | | | |
| Product Temperature | 65–75 °F (18–24 °C) | | |
| Ambient Air Temperature | 40–100 °F (4–38 °C) | | |
| Substrate Temperature | 40–100 °F (4–38 °C) | | |
| Pot Life | Material must be placed within 60 minutes of mixing. | | |
| Set Time | 3–12 hours initial set | (ASTM C-266) | |

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

- Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired.
- To ensure optimum repair results, the effectiveness of decontamination and preparation should be assessed by a pull-off test.
- Substrate should be Saturated Surface Dry (SSD) with clean water prior to application. No standing water should remain during application.
- Ensure any forms will retain grout without leakage.

MIXING

- For best results use a colloidal mixer similar to ChemGrout® CG-600 series or other type of high shear mixer at approximately 1,800 rpm.
- Start by using 11.5 pints (5.4 L) of water at approximately 70°F (If higher, use cold water; if colder, use warm water.) per bag in a clean and appropriate mixing vessel.
- Add bag of material to mixing vessel.
- Mix for minimum of 3 minutes after the addition of the last bag or until a homogeneous mix is achieved.
- Continue to agitate material in the holding hopper to achieve best flow.
- Only add additional water as needed up to a total maximum of 12.5 pints (5.9 L) (DO NOT EXCEED) per bag in order to achieve the flow specified on the Product Data Sheet (PDS).
- At higher temperatures and/or water amounts near upper range of maximum 12.5 pints (5.9 L), the grout will be less thixotropic. Therefore, it may be more appropriate to measure the flow using the standard flow cone test (ASTM C-939).
- Alternatively, for quantities less than 1 bag, mechanically mix with high-speed drill (2,500 rpm) and Sika jiffy paddle for a minimum of 6 minutes.
- Method of mixing may significantly affect the material properties, particularly flow.
- Project specific testing by the engineer is recommended to ensure that the mixing and placement methods result in the specified requirements.

APPLICATION

- Make sure all forming, mixing, placing, and clean-up materials are on hand.
- A mock-up should be completed on-site and inspected by the engineer to ensure that the placement means and methods yield the specified results.

LIMITATIONS

- Do not use as a patching or overlay mortar or in unconfined areas.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur® 32 Hi-Mod.
- Do not use in post tensioning applications

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

0 g/l

(EPA method 24)

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.

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Product Data Sheet

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