

## **BUILDING TRUST**

## PRODUCT DATA SHEET

# SikaGrout®

One-component, High performance, cementitious grout mix

#### PRODUCT DESCRIPTION

SikaGrout® is a non-shrink, cementitious grout with a unique 2-stage shrinkage compensating mechanism. It is non-metallic and contains no chloride.

With a special blend of shrinkage-reducing and plasticizing/water-reducing agents, SikaGrout® compensates for shrinkage in both the plastic and hardened states. A structural grout, SikaGrout® provides the advantage of multiple fluidity with a single component.

#### **USES**

- Use for structural grouting of column base plates, machine base plates, anchor rods, bearing plates, etc.
- Use on grade, above and below grade, indoors and out
- Multiple fluidity allows ease of placement: ram in place as a dry pack, trowel-apply as a medium flow, pour or pump as high flow

### **CHARACTERISTICS / ADVANTAGES**

- Easy to use, just add water
- Multiple fluidity with one material
- Non-metallic, will not stain or rust
- Low heat build-up
- Excellent for pumping: Does not segregate, even at high flow. No build-up on equipment hopper
- Superior freeze/thaw resistance
- Resistant to oil and water
- Meets ASTM C-1107
- Shows positive expansion when tested in accordance with ASTM C-827
- SikaGrout® is USDA-approved

#### PRODUCT INFORMATION

ackaging 50 lb. (22.7 kg) multi-wall bags; 36 bags/pallet				
Appearance / Color	Concrete gray			
Shelf Life	12 months in original, unopened bags			
Storage Conditions	Store dry at 40 to 95 °F (4 to 35 °C). Condition material to 65 to 75 °F (18 to 24 °C) before using			

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## **TECHNICAL INFORMATION**

<b>Compressive Strength</b>		Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(CRD C-621)		
	1 day	4,500	3,500	2,700	Tested at		
	<u> </u>	(31 MPa)	(24.1 MPa)	(18.6 MPa)	73 °F (23 °C		
	7 day	6,100	5,700	5,500	50 % R.H		
		(42 MPa)	(39.3 MPa)	(37.9 MPa)			
	28 day	7,500	6,200	5,800	_		
	<u> </u>	(51.7 MPa)	(42.7 MPa)	(40 MPa)	_		
	<sup>1</sup> CRD C-227: 10 <sup>2</sup> CRD C-611: 10						
Flexural Strength		Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(ASTM C-293		
	28 day	1,400	1,200	1,000	Tested at		
		(9.6 MPa)	(8.2 MPa)	(6.8 MPa)	73 °F (23 °C - 50 % R.H		
	<sup>1</sup> CRD C-227: 10 <sup>2</sup> CRD C-611: 10	30 % N.II					
Splitting Tensile Strength		Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(ASTM C-496		
	28 day	600	575	500	Tested at		
	-0 0.07	(4.1 MPa)	(3.9 MPa)	(3.4 MPa)	73 °F (23 °C		
	<sup>1</sup> CRD C-227: 10 <sup>2</sup> CRD C-611: 10	- 50 % R.H					
Shear Strength		Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(ASTM C-882 mod.		
	28 day	2,000	1,900	1,900	Hardened concrete		
	,	(13.7 MPa)	(13.1 MPa)	(13.1 MPa)	to plastic grou Tested at		
	<sup>1</sup> CRD C-227: 100–124 % (plastic), 124–145 % (flowable) <sup>2</sup> CRD C-611: 10–30 sec efflux time.						
Expansion	CRD C-011. 10	Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(CRD C-621		
	28 day	+0.021 %	+0.056 %	+0.027 %	Tested at		
					73 °F (23 °C		
	<sup>1</sup> CRD C-227: 10 <sup>2</sup> CRD C-611: 10	50 % R.H					
APPLICATION INFORMA	TION						
Mixing Ratio	Plastic <sup>1</sup>	Flowabl	le¹ Fluid²		(ASTM C-109		
	6 pt.+	6.5 pt.	8.5	pt.	Plastic/Flowable		
	<sup>1</sup> CRD C-227: 10 <sup>2</sup> CRD C-611: 10	T (ASTM C-939: Fluid					
Coverage	Approxima	Approximately 0.44 cu. ft./bag at high flow					
Thinner		Plastic <sup>1</sup>	Flowable <sup>1</sup>	Fluid <sup>2</sup>	(ASTM C-266		
	Initial	3.5–4.5 h	4.0–5.0 h	4.5–6.5 h	Tested at		
	Final	4.5–5.5 h	5.5–6.5 h	6.0–8.0 h	73 °F (23 °C		
				_	- 50 % R.H		
	<sup>1</sup> CRD C-227: 100–124 % (plastic), 124–145 % (flowable) <sup>2</sup> CRD C-611: 10–30 sec efflux time.						



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#### **APPLICATION INSTRUCTIONS**

#### SURFACE PREPARATION

Remove all dirt, oil, grease, and other bond-inhibiting materials by mechanical means. Anchor bolts to be grouted must be de-greased with suitable solvent. Concrete must be sound and roughened to a CSP 4 or higher to promote mechanical adhesion. Prior to pouring, surface should be brought to a saturated surface-dry condition. Steel should be cleaned and prepared thoroughly by blastcleaning to a white metal finish. Follow standard industry and Sika guidelines for use as an anchoring epoxy.

For pourable grout, construct forms to retain grout without leakage. Forms should be lined or coated with bond-breaker for easy removal. Forms should be sufficiently high to accommodate head of grout. Where grout-tight form is difficult to achieve, use SikaGrout® in dry pack consistency.

#### **MIXING**

Mix manually or mechanically. Mechanically mix with low-speed drill (400-600 rpm) and Sika mixing paddle or in appropriately sized mortar mixer. Make sure all forming, mixing, placing, and clean-up materials are on hand. Add appropriate quantity of clean water to achieve desired flow. Add bag of powder to mixing vessel. Mix to a uniform consistency, minimum of 2 minutes. Ambient and material temperature should be as close as possible to 70 °F (21 °C). If higher, use cold water; if colder, use warm water.

**Product Extension:** For deeper applications, SikaGrout® (plastic and flowable consistencies only) may be extended with 25 lb. (11.3 L) of 3/8 in. (9.5 mm) pea gravel. The aggregate must be nonreactive, clean, wellgraded, saturated surface dry, have low absorption and high density, and comply with ASTM C33 size number 8 per Table 2. Add the pea gravel after the water and SikaGrout.

#### **APPLICATION**

Within 15 minutes after mixing, place grout into forms in normal manner to avoid air entrapment. Vibrate, pump, or ram grout as necessary to achieve flow or compaction. SikaGrout® must be confined in either the horizontal or vertical direction leaving minimum exposed surface. SikaGrout® is an excellent grout for pumping, even at high flow. For pump recommendations, contact Technical Service. Wet cure for a minimum of 3 days or apply a curing compound which complies with ASTM C-309 on exposed surfaces.

#### **Tooling and Finishing**

After grout has achieved final set, remove forms, trim or shape exposed grout shoulders to designed profile.

#### LIMITATIONS

- Minimum ambient and substrate temperature 45 °F (7 °C)and rising at time of application
- Minimum application thickness: 1/2 in. (12.7 mm)
- Maximum application thickness (neat): 4 in. (50 mm). However, thicker applications can be achieved
- Contact Sika's Technical Services Department (800-933-7452) for further information
- Do not use as a patching or overlay mortar or in unconfined areas
- Material must be placed within 15 minutes of mixing
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Do not use on potential areas such as aluminum bars, rails, posts etc.

#### **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.



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#### **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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