

# **Non-Shrink Construction Grout**

Commercial grade, non-shrink, high-strength construction grout

©TCC Materials • March 2016 • Version 1.1

### PRODUCT DESCRIPTION

SAKRETE® Non-Shrink Construction Grout is a non-shrink, non-metallic, Portland cement based material with special additives used for grouting of machinery bases, bearing plates, precast concrete, columns, beams, and anchoring applications. Designed with high flexural and compressive strength to handle high-load transfers.

#### WHEN/WHERE TO USE

- · Precision grouting heavy machinery bases and bearing plates
- Structural grouting of steel columns, pre-cast columns, beams, and rails
- · Underwater grouting of pump applications
- · Securing anchor bolts, dowel rods, and railings
- Grouting of post tension steel reinforcement in bonded and unbonded post tensioned concrete applications

#### **ADVANTAGES**

- Exceeds ASTM C 1107 Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
- Non-chloride formula will not promote corrosion of steel
- Non-shrink, Per ASTM C 1107
- Non-metallic, non-staining, gray color
- Meets Corps of Engineers Specification (USACE) CRD-C 621
- Plastic and flowable fluid consistency
- Pumpable for easy placement

# **PACKAGING**

50 lb. (22.7 kg) pail (BOM 120024)

## TYPICAL YIELD

One 50 lb. pail will yield 0.45 cu. ft. (12.7 L) when mixed to a flowable consistency.

**WARNING: INJURIOUS TO EYES** 

KEEP OUT OF REACH OF CHILDREN

Helpful Items:









#### **TECHNICAL DATA**

Technical Data Tests at 73°F (23°C)				
	Plastic	Flowable	Fluid	
Compressive Strength (ASTM C109)				
1 Day	3,000 psi	3,000 psi	2,500 psi	
3 Days	9,500 psi	9,000 psi	5,000 psi	
7 Days	10,000 psi	9,500 psi	6,000 psi	
28 Days	14,000 psi	12,500 psi	8,000 psi	
Height Change ASTM C1090				
1-28 Days	0-0.2%	0-0.2%	0-0.2%	
Height Change ASTM C827				
	+0.6%	+0.4%	+0.3%	

#### **SURFACE PREPARATION**

Remove all unsound concrete, grease, oil, paint, dust, efflorescence, and any other foreign material that will inhibit performance. It may be necessary to roughen smooth surfaces or etch old surfaces with acid. Prior to grout placement, all surfaces must be clean and saturated with water. Remove excess water before placing the grout. Provide air relief holes where necessary if grouting is beneath large plates.

#### **MIXING**

Add only clean water using the minimum amount necessary to reach the desired flow characteristics. For best results, use a mechanical mixer with rotating blades. Use a mixer large enough to permit continuous placement before any part of the grout has set. Always mix entire contents of bag. Add approximately 3/4 of the expected mix water into the mixer, add the non-shrink grout mix, then add additional water in small increments until desired consistency is reached. Mix for

(22.7 kg) of Non-Shrink Construction Grout		
Plastic	1 gal. (3.8 L)	
Flowable	1 gal. + 1 pt. (4.3 L)	
Fluid	1 gal. + 3 pt. (5.2 L)	

a minimum of 5 minutes. Do not mix more than can be placed in a 30 minute time frame.

#### **APPLICATION**

Read all directions before starting work. After cleaning and pre-wetting the surface, place the grout quickly in a manner to avoid air entrapment. Rodding the grout lightly will help move material. Avoid segregation. Be careful to not overwork grout. Avoid vibration which can cause bleeding and segregation. Shut down nearby machines that will cause vibration of the grout for at least 24 hours. Whenever possible, bolt holes should be grouted first. Placement and consolidation should be continuous for any one section of the grout. Excess Non-Shrink Construction Grout may be removed after the initial set. Grout should not be re-tempered. temperatures should all be maintained between 50°-90°F (10-32°C). Use cold water in hot weather to slow setting, and hot water in cold weather to speed setting times. Do not use if temperatures are expected to go below 32°F (0°C) within 12 hours of application.

#### **CURING**

Damp cure Non-Shrink Construction Grout for a minimum of 3 days. Forms may be removed as soon as the grout reaches its final set. Protect from freezing for a minimum of 48 hours after placement.

#### **CLEAN UP**

Use warm, soapy water for cleaning hands and tools while product is wet. SAKRETE Concrete Mortar Dissolver can be used if dried or hardened on tools and equipment.

# **NOTES AND LIMITATIONS**

- · Gloves and goggles are recommended safety equipment
- Use only clean mixing container and
- Store in tightly closed container off the floor in a dry place

Proper application and installation of all SAKRETE products are the responsibilitv of the end user.



# **Non-Shrink Construction Grout**

Commercial grade, non-shrink, high-strength construction grout

©TCC Materials • March 2016 • Version 1.1

#### **WARNING**

WARNING! CAUSES IRRITATION -Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Exposure may result in irritation of the skin, eyes or nasal passages from alkali in Portland cement. When wet, contact with the skin or eves may result in irritation or burns. FIRST AID: In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get prompt medical attention; for skin, wash thoroughly with plenty of soap and water. If irritation persists, get medical attention. WARNING! HAMFUL IF INHALED - Avoid breathing dust. Keep container closed. Use with adequate ventilation. Excessive exposure by inhalation over an extended period of time may result in the development of pulmonary diseases including pneumoconiosis and silicosis. Crystalline Silica has been classified by IARC and NTP as a carcinogen. WARNING: Wear protective clothing and equipment. KEEP OUT OF REACH OF CHILDREN. READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product.

### LIMITED PRODUCT WARRANTY

The manufacturer warrants that this product shall be of merchantable quality when used or applied in accordance with the manufacturer's instructions. This product is not warranted as suitable for any purpose other than the general purpose for which it is intended. This warranty runs for one (1) year from the dates the product is purchased. ANY **IMPLIED** WARRANTY MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THIS WARRANTY. Liability under this warranty is limited to replacement of defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.

#### **ENVIRONMENTAL ADVISORY**

Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.

SAKRETE® and the background design are registered trademarks of SAKRETE of North America LLC, Charlotte, NC 28273 • ©2006. SAKRETE® is manufactured under license from SAKRETE of North America LLC.

Shelf Life	One year in original, unopened container.
Storage Conditions	Store dry in tightly sealed container.
Color	Gray