

# **Non-Shrink General Purpose Grout**

Commercial grade construction grout

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# PRODUCT DESCRIPTION

SAKRETE<sup>®</sup> Non-Shrink General Purpose Grout is a non-shrink, non-metallic, Portland cement based structural hydraulic cement for high-strength grouting.

# WHEN/WHERE TO USE

- Grouting of poured in place, precast, tilt-up and pre-stressed concrete
- · Grouting of heavy machinery
- Grouting of sole plates and steel bearing plates
- · Securing anchor bolts, and dowel rods
- Grouting of post tension steel reinforcement in bonded and unbonded post tensioned concrete applications
- · Concrete columns

## **ADVANTAGES**

- Meets ASTM C 1107 Packaged Dry, Hydraulic-Cement Grout (Non-shrink)
- 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 CRD-C 621
- · Plastic and flowable fluid consistency
- Pumpable for easy placement
- Super plasticized for improved strength

# **PACKAGING**

50 lb. (22.7 kg) pail (BOM 120025)

# TYPICAL YIELD

One 50 lb. bag will yield 0.45 cu. ft. (12.7 L) at a flowable consistency

**WARNING: INJURIOUS TO EYES** 

KEEP OUT OF REACH OF CHILDREN

# **Helpful Items:**









Water Concrete Mixer

## **TECHNICAL DATA**

Technical Data Tests		
	Plastic	Flowable
Compressive Strength (ASTM C109)		
1 Day	1,940 psi	1,450 psi
3 Days	3,300 psi	2,790 psi
7 Days	4,680 psi	4,280 psi
28 Days	6,770 psi	5,580 psi
Height Change Expansion % (ASTM C1090)		
1 Day	+0.05%	+0.03%
3 Days	+0.15%	+0.13%
14 Days	+0.13%	+0.11%
28 Days	+0.12%	+0.10%
Consistency of Flow		
ASTM C942	101%	129%

### **SURFACE PREPARATION**

Remove all unsound concrete, grease, oil, paint, and any other foreign material that will inhibit performance. 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.

Suggestions in Form Work: Wood form work or other absorbent forms should be coated with a form release oil to prevent grout adherence and water absorption. Design form work to facilitate rapid, continuous and complete filling of the space to be grouted. Use methods that will enable the grout to flow by gravity between the surfaces and keep the grout in full contact with these surfaces until it has hardened. Refer to: ACI 351.R -99 Report on Grouting between Foundations and Bases for Support Equipment and Machinery for important information and recommendations

## MIXING

Add only clean water. The water quantities shown are approximate and may vary slightly with type of equipment

and application conditions. Water demand and mix temperature must be determined using standard test methods consistency and temperature measurement at the time of application. 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 no longer than 5 minutes. Do not mix more than can be placed in a 30 minute time frame.

# **Desired Grout Consistency:**

Flowable (Pumping Consistency), 50 lbs. (22.7kg) grout, approximately 8½ pints water (4 L)

**Plastic** (Trowel Consistency), 50 lbs. (22.7 kg) grout, approximately  $7\frac{1}{2}$  pints water (3.5 L)

# **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 grout may be removed after the initial set. Non-Shrink General Purpose Grout should not be re-tempered. The air, mix, and substrate temperatures should all be between 40°-90°F (4.4°-32.2°C) within 24 hours of application.

# **CURING**

Non-Shrink General Purpose Grout can be exposed under normal weathering conditions. Forms may be removed as soon as the grout reaches its final set.



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Protect from freezing for a minimum of 48 hours after placement. ACI 308-Standard Practice for Curing Concrete.

#### **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 tools
- Store in tightly closed container off the floor in a dry place

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

#### 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 eyes 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 OF 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 **UNDER** RECOVERABLE 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.

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