



COSTARGROUT C30

Non-Shrink Precision Grout

PRODUCT DESCRIPTION

COSTARGROUT - C30 is high strength, non-shrink, and Portland cement based precision grout with excellent high early and ultimate strengths. The precision grout product includes expansive additives, requiring only the addition of water to obtain flow-able properties and high strengths. It offers exceptional strength, and durability making it an ideal choice for a wide range of applications in various industries, including construction, manufacturing, and transportation.

FEATURES

- Quick setting.
- High early strength gain.
- Non-bleeding /non-segregating.
- Non-corrosive/non-chloride/non-metallic.
- Shrinkage compensating.
- Usable over a wide range of consistencies from dry pack to flow-able.

TYPICAL APPLICATION

COSTAR NON SHRINK PRECISION GROUT can be used in grouting of:

- All types of machinery
- Steel Columns
- Bearing Plates
- Pre-Cast Concrete
- Other anchoring conditions that require high in-service strength
- All precision, non-shrink grouting applications with clearances of
- 10mm or more, including:
- The non-shrink characteristics of Non-shrink Precision Grout make it stable
- and capable of handling high load transfers.

MIXING INSTRUCTION

- The COSTAR Non-Shrink All-Purpose Grout should be mechanically mixed for a minimum of 5 minutes.
- Add only enough water to achieve the flow required for the application.
- Do not add more than the amount needed to produce a 20 second flow per Test Method ASTM C 939.

SURFACE PREPARATION

- Surfaces to receive the grout must be clean and free of any type of foreign matter, grease, paint, oil, dust or efflorescence.
- In some Cases, it may be necessary to roughen smooth surfaces or etch old ones with acid.
- The area should be thoroughly flushed and soaked with clean water prior to grouting, leaving no standing water.
- Place the grout quickly and continuously using light rodding to eliminate air bubbles.

CURING & WORKING TIME

When properly mixed to a fluid consistency, the non-shrink grout will comply with ASTM C 1107 and CRD621 retain a fluid consistency for the maximum usable working time of 25 minutes at 500 F (100 C). A damp cure of at least 3 days is required to control the non-shrink characteristics and maintain strength levels.

PRECAUTION

Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement based products, should be worn.



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TECHNICAL PROPERTIES

Packaging	20kg									
Appearance	Grey/white powder									
Shelf life	12 months from date of production									
Storage condition	Product must be stored in original, unopened, and undamaged sealed packaging in dry condition and temperature between +5 °C and +35 °C.									
Mechanical properties	Engineering data						Setting time			
	Age (Days)		1	3	7	28	Consistence	Trowel-able	Flow-able	
		Consistence								
	Compressive Strength MPa	Stiff	>32	>43	>55	>71	Initial settime	3hrs	4.5hrs	
		Plastic	>29	>39	>49	>63	Final settime	4.5hrs	6.5hrs	
		Flowable	>24	>34	>43	>57	Water ratio	3.2L/20kg	3.6L/20kg	
	Flexural strength MPa	-	-	-	-	>25.5	Tested at 20°C 50% RH Tested to AS 1012.18 for setting times			
	Bond strength MPa	-	-	-	>16	>20				
	Tested AS 1012.9 and AS2073 at 20°C for compressive strength / Tested to ASTM C348-86 at 20 degrees for flexural strength / Tested to ASTM C882-1987, Slant shear method.									
	Mixing ratio	3.6 litres of water per 20kg bag of product								
Fresh-wet-density	Approx. 2200 kg/m ³ (flow-able/pourable)									
Application temp	A minimum 10° C - Maximum 30° C									
TECHNICAL PROPERTIES										
Expansion character	Expansion 1-2% Plastic state									
Time of expansion	Start 15 min Finish 3 hrs (plastic state)									
Pot life	~1 h (23 °C)									
Bleed	0%									
Youngs modulus	25GPa									
Consumption	115 bags/ (m ³)									
Layer thickness	Min. 10 mm per pour, Max. 75 mm per pour									
Fresh mortar density	~2.20 kg/l (25 °C)									
Ambient air temperature	+5 °C min. / +35 °C max									



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STANDARD COMPLIANCE

- CRD-C 621, Corps of Engineers, Specification for Non-Shrink Grout
- ASTM C1107, "Standard Specification for Packaged Dry, Hydraulic-Cement Grout
- Canadian MTQ

STORAGE AND SHELF LIFE

Protect from freezing, if frozen or crystallized, thaw gradually and stir to homogenous mixture. Shelf life in unopened original containers is 12 months when stored at 70°F (21°C).

PRECAUTION

COSTAR NON-SHRINK PRECISION GROUT contains hydraulic cement and other carefully selected additives. Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement based products, should be worn. Material Safety Data Sheets are available upon request.

HEALTH & SAFETY

- Please ensure that hand gloves and goggles are worn during installation
- Apply in ventilated areas, away from flames
- It is only important that during application and after application, standard safety procedures are done.
- Please consult current MSDS for product.
- *For Professional Use only.*

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.