

## PRODUCT DESCRIPTION

Precision Grout is specially formulated for precision non-shrink industrial applications where metallic, gas forming, and sand-cement grouts are unsuitable. This non-shrink, non-metallic grout does not contain chloride and can be used in a range of consistencies from plastic to fluid.

## GENERAL USES

***Precision Grout is ideally suited for a wide range of applications requiring strength and durability including:***

- Heavy equipment and machinery bases
- Structural Columns
- Pump & Equipment Bases
- Pre-Cast Tee joints
- Re-pointing mortar joints
- Structural Cracks
- Bearing Plates
- Rail Posts, Seating Bolts
- Post Tensioned Cables

## FEATURES

Precision Grout contains specially graded, fine, select silica aggregates; cement; shrinkage compensating ingredients; and plasticizing and water-reducing agents. Strength, dimensional stability, flowability, workability and setting characteristics are assured by careful blending in Adhesives Technology's own plants under rigid quality control standards.

- High Early strength
- Non-Shrink
- Non-rusting
- Excellent freeze-thaw resistance
- Interior/exterior applications

## STANDARDS

Precision Grout conforms to requirements of Corps of Engineers CRD C 621 and ASTM C 1107

## INSTRUCTIONS FOR USE

### ***Surface Preparation:***

Surfaces must be free from form oil, grease or any loose materials. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

## TYPICAL PERFORMANCE DATA

WATER REQUIREMENTS PER 50 LBS.	5.0-7.0 PINTS 2.4-3.3 LITERS 5.2-7.3 LBS. 2.4-3.3 KG.		7.0-8.0 PINTS 3.3-3.8 LITERS 7.3-8.3 LBS. 3.3-3.8 KG.		8.0-9.0 PINTS 3.8-4.3 LITERS 8.3-9.4 LBS. 3.8-4.3 KG.		VOLUME CHANGE ASTM C109
	COMPRESSIVE STRENGTH ATSM C109						
	PLASTIC <sup>1</sup>		FLOWABLE <sup>2</sup>		FLUID <sup>3</sup>		% CHANGE
	PSI	MPA	PSI	MPA	PSI	MPA	
1 DAY	4000	28	3500	24	2500	15	0.03
3 DAYS	6000	38	5500	38	4500	31	0.04
7 DAYS	8500	59	7500	52	6000	41	0.04
28 DAYS	11000	78	8500	59	7500	52	0.04

### ***Base plate preparation:***

It is essential that area is clean and free from oil, grease, and scale. Air pressure relief hole should be provided to allow venting of any isolated high spots.

### ***Leveling Shims:***

If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

***Pre-soaking:*** Several hours prior to grouting, the clean area should be flooded with fresh water. Immediately prior to grouting, any free-standing water should be removed with air to blow out boltholes and pockets.

***Approximate Yield:*** .43 cu ft. per 50 lb bag.

### ***Mixing:***

The amount of water added to obtain the desirable consistency must be precise, and an accurate measuring method must be employed. Consistencies described conform to CRD-C621-83. According to the desired grout consistency, the amount of water required for each 50 lb. Bag of ***Precision Grout is:***

- Plastic
  - 50 lbs. grout
  - 5.00 to 7.00 pints water
  - 5.20 to 7.30 lbs.
  - 2.40 to 3.30 liters
- Flowable
  - 50 lbs. grout
  - 7.00 to 8.00 pints water
  - 7.30 to 8.30 lbs.

- 3.30 to 3.80 liters
- Fluid
- 50 lbs. grout
- 8.00 to 9.00 pints water
- 8.30 to 9.40 lbs.
- 3.80 to 4.30 liters

In cold conditions warm water (95-110°F) may be used to accelerate the strength development.

**Application:**

For best results, a mechanically powered grout mixer should be used. For small quantities of 1-2 bags, a slow speed electric drill with a suitable paddle is recommended.

It is essential that machine mixing capacity and labor availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of holding tank with provision for gentle agitation to maintain fluidity. The selected water content should first be accurately measured into the mixer. Slowly add the total contents of Precision Grout bag. Mix continuously for 5 minutes, making sure that a smooth, even consistency is obtained. Place the grout within 5 minutes of mixing to gain the full benefit of the expansion process. Where large volumes have to be placed Precision Grout may be pumped. A heavy-duty diaphragm pump is recommended for this purpose.

**For deep applications (over 2"), a clean 3/8" (1cm) pea gravel should be added to the grout:**

- 2" to 5" application 25% by weight
- Over 5" application 50% by weight

**Covering and Placing:**

A 50 lb. Unit of Precision Grout will yield approximately .43 cubic foot.

When placing Precision Grout or any other grout, a continuous grout flow is essential. Sufficient grout must be

available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next.

Pouring and placing grout should be from one side only to eliminate voids in the cured grout by entrapment of air or surplus pre-soaking water. A grout head must be maintained at all times so that a continuous grout front is achieved.

**Curing:**

Upon completion of the grouting operation, exposed areas, which are not to be cut back, should be thoroughly cured using normal concrete curing methods and practice. Adhesive Technology manufactures a variety of chemical curing compounds, which may be used with Precision Grout. Please contact your Adhesive Technology representative for additional information.

**PACKAGING**

- 50 lb. bags

**LIMITATIONS/WARNINGS**

Not recommended for placing below 35°F. Do not re-temper. Do not vibrate. Do not use any additives including accelerators, water reducers, or air entraining agents. Do not use water temperature exceeding 80°F.

Refer to material safety data sheet prior to use.

Avoid direct contact with skin and eyes. Product contains Portland Cement. May cause irritation and possibly cement burns. Wash exposed skin area promptly with water. In case of eye contact, flood eyes repeatedly with water and call physician. Do not take internally. Harmful if ingested. Keep product out of reach of children.

**TECHNICAL SERVICES**

Adhesives Technology's Technical Service Department provides complete product and technical support.

LIMITED WARRANTY NOTICE — Adhesives Technology warrants that at the time and place we make shipment, our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM OR TRADE OR OTHERWISE. As the exclusive remedy for breach of this Warranty, we will replace defective materials, provided, however, that the buyer examine the materials when received and promptly notify us in writing of any defect before the materials are used or incorporated into a structure. Twelve (12) months after Adhesives Technology has shipped the material, all our Warranty and other duties with respect to the quality of materials delivered shall conclusively be presumed to have been satisfied, all liability therefore terminates, and no action for breach of any duties may there-after commence. Adhesives Technology shall in no event be liable for consequential damages. Unless otherwise agreed to in writing, no warranty is made with respect to materials not manufactured for Adhesives Technology. We cannot warrant or in any way guarantee any particular method of use of application or the performance of materials under any particular condition. Neither this Warranty nor our liability may be extended or amended by our salespeople, distributors or representative or by any sales information or drawings.

