



ChemMasters®

ChemPlug™

Fast Setting
Hydraulic Cement

Sets in 4 to 6 minutes @70°F (21°C)

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

ChemMasters' **ChemPlug** is a fast setting expansive hydraulic cement compounded to withstand continual exposure to water, even under pressure. **ChemPlug** fills and seals pores and voids in concrete and masonry surfaces. It sets in 4 to 6 minutes at 70°F (21°C).

USES

- Stops leaks with water tight seals
- Emergency repairs in concrete such as ruptured concrete water pipes
- Patch construction faults in precast and cast on location structures
- Stops leaks in basements, foundations, sewer pipes, manholes, and around conduit, gas and water lines that pass through concrete walls
- Under water repairs: swimming pools, cisterns, troughs, silos, tunnels, sewers, elevator pits, electrical vaults, marine structures
- Industrial, commercial, residential, electrical, and plumbing concrete repairs above or below grade horizontal, vertical and overhead surfaces

ADVANTAGES

- Sets under water to stop leaks immediately
- Does not deteriorate under continuous exposure to water
- Sets rapidly for emergency repairs with minimal downtime
- **ChemPlug** is available in three formulations designed for different set times @ 70°F (21°C):
 1. **ChemPlug** sets in 4 to 6 min.
 2. **ChemPlug F** sets in 1 to 2 min.
 3. **ChemPlug S** sets in 15 to 20 min.
- Slightly expansive with high compressive strength for durable repairs
- Economical to use, does not require special tools or procedures, mixes with water

ChemPlug Packaging Part Number

10 lb (4.5 kg) cans	4 per case	F3000.04
Pails 50 lb (22.7 kg)	36 per pallet	F3000.50

TECHNICAL DATA

Estimating Guide

17 in ³ per lb	603 cm ³ per kg
Yield 50 lbs (22. kg)	0.5ft ³ (0.014m ³)

ChemPlug Physical Properties

Set Times ASTM C191 Vicat Method	4 to 6 minutes @ 70°F (21°C)
Application Temp	40°F (10°C) to 80°F (27°C)
Flexural Strength ASTM C 348 @	
17 days	625 psi
28 days	860 psi
Compressive Strength ASTM C 109	
1 hr	970 psi
1 day	1700 psi
7 days	5200 psi
Tensile Strength ASTM C 307	
7 days	196 psi



ChemMasters®

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Aug 2013

DIRECTIONS

Surface preparation: Enlarge crack or hole to a depth and width of 3/4" (1.9 cm). Undercut is best. Do not 'V' cut. Chip out joint cutting into both wall and floor in wall to floor joints. Brush out loose material. Dampen the surface if leak is not active.

Mixing: Add clean potable room temperature water to a small amount of **ChemPlug** until a putty like consistency is achieved. Do not mix more than can be placed before set time.

Low or High Temperatures: Under 40°F (4°C) warm **ChemPlug** and mixing water to 70°F (21°C) to speed set time. For higher temperatures or when a slower set time is needed use cold water.

Application: Once **ChemPlug** is mixed with water, quickly place it firmly into opening and hold tightly with trowel or gloved hand for about 2 minutes or until mortar is hard. Do not twist or grind the mixed **ChemPlug** into place. This will weaken the repair. Do not over trowel surface.

To Stop Running Water: Prepare **ChemPlug** and water mixture. Seal crack from top to bottom. Force **ChemPlug** firmly into the point of greatest pressure. Hold it in place with trowel or gloved hand. Exert pressure until it hardens and water stops flowing. After material has set firmly shave excess material to be even with the surface.

To Seal Wall to Floor Joint: Prepare **ChemPlug** and water mixture. Force **ChemPlug** into crack and smooth to form a cove at the base of the wall.

Setting Anchor Bolts or Fixtures: Prepare **ChemPlug** and water mixture. Make a hole at least 0.5" (1.25cm) larger on all sides than the bolt or fixture to be anchored.

Walls of the hole should be dampened with clean potable water. Blow out any excess water. Pack firmly with **ChemPlug** mixture. Force in bolt or fixture. Tamp **ChemPlug** firmly in place. Keep damp for 60 minutes. Do not apply excessive load for several hours.

Underwater Applications: Contact ChemMasters' Technical Service Department for detailed instructions

Curing: **ChemPlug** continues to gain strength as long as it is damp. It should be kept wet for at least 60 minutes after installation to reach maximum initial strength. **ChemPlug** locks itself in by expanding as it cures. It becomes stronger and more water tight when subjected to water pressure.

LIMITATIONS

- **ChemPlug** hardens in 4 to 6 minutes. Prepare only enough for immediate use
- Do not use as a topping or as a repair mortar for traffic bearing surfaces
- Do not use as a non-shrink grout under columns or machinery
- Do not apply to frozen or frosted surfaces
- Keep moist for at least 60 minutes after installation to cure and reach maximum initial strength
- Do not use as a structural or machine support grout.
- Consult ChemMasters' Technical Service Department for recommendations

STORAGE

Store in a sealed moisture proof container in cool dry area. Shelf life of properly stored material is 2 years from date of manufacture.

CAUTIONS

Causes irritation to eyes. May cause skin irritation, sensitization, and chemical burns. Respiratory tract irritant. Use with adequate ventilation. Do not take internally. See Safety Data Sheet for proper handling instructions.

Keep out of Reach of Children

Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.

This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT. We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.