



CHEM-FLUID

100% Solids, Two-component Moisture Insensitive Epoxy Binder, Suitable for Cold Climate

PRODUCT DESCRIPTION

Chem-Fluid® is a two component, 100% solids, medium modulus, medium viscosity, moisture insensitive epoxy binder/bonding system. This product meets ASTM C-881.

FIELDS OF APPLICATION

- As structural bonding of new concrete or hydraulic mortar to old concrete.
- On-situ concrete extensions and modifications to existing structure.
- Structural bonding of cement toppings and screeds.

PRODUCT FEATURES

- Moisture Insensitive
- 100% solids
- High strength Good flexibility No shrinkage
- Fast curing Chemical resistant

PACKAGING

Product	Packaging
CHEM-FLUID	3 Gallon (3.785 Liters) Unit Part A: Two 1 Gal Cans, Part B: One 1 Gal Can
	15 Gallon (56.775 Liters) Unit Part A: Two 5 Gal Pails, Part B: One 5 Gal Pail

TECHNICAL DATA

Technical Data for Unmixed Parts

Property @ 25°C (77°F)	Resin Part A	Hardener Part B	Test Method
Solids	100 %	100 %	-
Color	Clear, Straw	Amber	-
Density, Lb/Gal (Kg/L)	< 9.4 (1.17)	< 8.03 (0.962)	ASTM D1475
Mixing Ratio A: B	2: 1 By Volume		-
Shelf Life	1 years	1 years	-

Technical Data for Mixed Parts

Property (Mixed A & B)	Value @ 25°C (77°C)	Test Method
Mixed Viscosity, cPs	2400	Brookfield
Gel Time @ 5 mils, hour	6 - 8	-
Pot Life @ 3-oz (30 milliliters), minute	21	-
Shore Hardness @ 3 Days, D	79	ASTM D2240
Tensile Strength @ 7 Days, Psi (MPa)	6000 (41.3)	ASTM D-638
Flexural Strength @ 7 Days, Psi (MPa)	7000 (48.2)	ASTM D-790
Compressive Strength @ 7 Days, Psi (MPa)	6000 (48.2)	ASTM D-695
Bond Strength, psi	> 1500	ASTM C-882
Water Absorption 24 hrs, %	< 0.20	ASTM D570
Elongation (Average), %	22	ASTM D638
Final Cure, day	7	-

APPLICATION

Limitations: Exposure to temperatures exceeding 149°F (65°C) for prolonged periods is not recommended.

Coverage: 1 Gallon of CHEM-FLUID will yield 20 mils (500 microns) when applied at 80 ft² / Gallon (1.96 m² / Liter).

Surface Preparation:

Concrete Substrate: surface of application should be clean and sound. The surface must be free of any dust, oil, grease, laitance, curing compounds, or any other contaminants. Surface may be dry, damp or wet, but must be free of standing water. The very best results are obtained on dry concrete. Do NOT apply on surfaces which have been sealed with a permanent type of form oil, curing compound or release agent. Remove these substances before application. The surface temperature must be 40°F and rising. On new concrete surfaces, remove laitance and unbonded cement particles by acid etching. Dampen the surface with tap water. Dilute muriatic acid to a 10% solution. ALWAYS add the acid to the water. Scrub the acid/water solution onto the surface at the rate of 50 square feet per gallon. Allow the solution to sit for 20 minutes or until the acid bubbling stops. Scrub and flush thoroughly with clean water. Remove water with squeegee, vacuum or broom. Allow the surface to air dry. Please note: If the use of muriatic acid is prohibited, check with International Chem-Crete for substitute etching solution.

Mixing: stir each component separately. Mix 2 parts A and 1 part B by volume into a clean mixing container. Mix the epoxy with a slow speed drill with a mixing paddle attachment. Carefully scrape the sides and bottom of the pail during mixing. Blend for 3 minutes. Mix only the amount of material that can be used within the pot life.

Please note: large batches of epoxy will cure much faster than small batches. Mixed epoxy will cure much faster in hot weather than in cold weather.

Application: bonding new concrete to old concrete: apply neat material to the surface by brush, roller or spray.

Pour new concrete while the epoxy is still tacky. If the material loses its tack before new concrete is poured, re-coat with fresh material.

As a mortar: prime the prepared surface with neat Chem-Fluid. Add up to five parts of clean, dry bagged aggregate. Place to mortar before the primer becomes tack-free. Compact and finish the mortar with a trowel. Keep the trowel clean by using M.E.K. or Xylene.

For bolt grouting, contact International Chem-Crete or your local Chem-Crete representative for specific recommendations. As a coating: the material may be applied by brush or roller. The materials applied at the rate of 100-160 square feet per gallon. Two coats are recommended. Apply the second coat within 36 hours.

CLEANING

Remove uncured CHEM-FLUID from tools and equipment with suitable solvents such as Xylene, Toluene or CHEM-CRETE BLENDED SOLVENT immediately after use. Cured material may only be removed mechanically.

STORAGE

The product can be stored for minimum of twelve months at temperature from 50°F to 95°F (10°C to 35°C) in the unopened original packaging. Protect from direct sunlight.

SAFETY PRECAUTIONS

After hardening thoroughly, CHEM-FLUID is physiologically harmless. Keep the resin and hardener away from the eyes mouth and skin. Do not breathe in the vapors. The uncured mixture can cause irritation of the skin. For best protection, wear rubber or plastic gloves. In case of contamination, wipe away resin or hardener immediately from the skin using paper towels and then wash with soap and water or hand cleaning detergent. Empty resin and hardener cans must be disposed according to local city code or regulations. Under no circumstances empty cans should be used to store food or drink

even if they have been thoroughly cleaned. Follow all cautionary direction as printed on container's labels.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

DISCLAIMER: The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM250311

Manufactured By:



International Chem-Crete Inc., 800 Security Row, Richardson, TX 75081, U.S.A

Tel: (972) 671-6477, Fax: (972) 238-0307

contactus@chem-crete.com www.chem-crete.com