

1. Product Name

Ultrabond EGP Pre-proportioned High Performance Epoxy Base Plate Grouting System

2. Manufacturer

Adhesives Technology Corp.
450 East Copans Road
Pompano Beach, FL 33064
(800) 892-1880 or (954) 782-2221
Fax: (800) 362-3320 or (954) 782-2499
E-mail: info@atc.ws
Web Address: www.atc.ws

3. Product Description

GENERAL DESCRIPTION

Ultrabond EGP is a three component, 100% solids, high performance, high strength epoxy grouting system. It is a solvent free, low odor, moisture insensitive, prepackaged epoxy grout system. **Ultrabond EGP** can be mixed to three different consistencies:

- Trowelable
- Plastic / Flowable
- Pourable / Self Leveling

BASIC USE

Ultrabond EGP is ideal for precision seating of base-plates, grouting under heavy duty equipment, including heavy impact and vibratory machinery, reciprocating engines, compressors and pumps. It is also ideal as an epoxy grout for concrete patching and overlays.

FEATURES

- Fast strength gain
- Low exotherm
- Oil and Chemical Resistant
- Pre-proportioned kit
- High strength epoxy grout
- High effective bearing area
- Corrosion and impact resistant
- High vibration resistance
- Non-shrink
- Moisture insensitive
- Variable ratio fill system: ratio of special blend aggregate to total liquids (by weight)

Trowelable	5.02 : 1 ratio
Plastic / Flowable	2.92 : 1 ratio
Pourable/Self Leveling	2.45 : 1 ratio

LIMITATIONS:

- Do not thin – addition of solvents will prevent proper cure
- Silica sand blend aggregate (component C) must be kept dry
- Mix in complete units (do not mix smaller batches)
- Do not use below 40°F

APPLICATIONS INCLUDE:

- High strength grouting – vibratory, high impact, heavy load conditions
- **Trowel grade** patch & spall repair – when mixed with Bag#1 plus Bag#2 plus Bag#3. (5.02 to 1 ratio by weight of aggregate to total liquids.)
- **Plastic/Flowable** patch and spall repair- when mixed with Bag#1 plus Bag#2 (Do not use Bag#3) (2.92 to 1 ratio by weight of aggregate to total liquids.)
- **Pourable/Self leveling** patch & spall repair – when mixed with Bag#1 only. (DO NOT USE Bags#2 or #3) (2.45 to 1 ratio by weight of aggregate to total liquid)
- Patching and repairing warehouse, office and garage floors
- Machine Base Grouting
- Grouting under crane rails

COLOR

“A” Component (resin): Clear; “B” Component (hardener): Amber
“C” Component (aggregate): Tan; Mixed: Tan

SOLIDS: Weight: 100% Volume: 100%

SHELF LIFE: 24 Months

STORAGE: Store in unopened containers at 40°F – 90°F.

SIZE/PACKAGING

Ultrabond EGP is available in two packaging configurations:

- 0.44 cubic feet (760 cubic inches) Part Number B5GM-EGP
 - All components contained in one 6.5 gallon container.
 - Contains .71 gallons of resin, .21 gallons of Hardener and three bags of special blend aggregate totaling 43 pounds
 -
 - 2.0 cubic feet (3,456 cubic inches) Part Number: B3.5GM-EGP
 - “A” and “B” component kit contains 3.24 gallons of resin and 0.96 gallons of hardener.
- PLUS:
“C” component--aggregate; Part Number: SFIL-EGP
Contains 4 bags of special blend aggregate, total 200 lbs.

Quick Selection Guide	
Gel-Time (77°F.)	30 minutes (neat resin)
Grout working time (77°F.) – 2 inch depth	
<ul style="list-style-type: none"> • Trowelable 5.02 to 1 ~ 60 minutes • Plastic / Flowable 2.92 to 1 ~ 40 minutes • Pourable/Self Leveling 2.45 to 1 ~ 35 minutes 	
Application Temperature Range	40° F. – 110° F.

Manufactured In The U.S.A. by Adhesives Technology Corp.

4. Technical Data

Technical Data				
Properties	ASTM	Results		
		Trowelable	Plastic Flowable	Pourable-Self Leveling
Compressive Strength--- 6 hours (77°F)	D695	3,400 psi	3,800 psi	5,000 psi
Compressive Strength--- 24 hours (77°F)		9,800 psi	8,300 psi	9,300 psi
Compressive Strength--- 7 days (77°F)		15,400 psi	12,500 psi	12,000 psi
Compressive Strength--- 14 days (77°F)		15,800 psi	13,000 psi	12,500 psi
Bond Strength @ 7 days	C882	2,400 psi	> 2,400 psi	> 2,400 psi
Gel-Time (60 gram mass)	C881	60 min.	40 min	35 min
Mixed Viscosity (A + B + C components)	D2393	Non-Sag	Flowable	Self-Leveling
Impact Strength		Better than concrete		
Abrasion Resistance		Better than concrete		

5. Coverage Chart

Coverage Chart			
B5GM-EGP		2" depth	6" depth
Trowelable	5.02 to 1	2.64	0.88
Plastic / Flowable	2.92 to 1	1.86	0.62
Pourable / Self-Leveling	2.45 to 1	1.73	0.58
B3.3GM-EGP			
Trowelable	5.02 to 1	12.00	4.00
Plastic Flowable	2.92 to 1	8.45	2.82
Pourable / Self-Leveling	2.45 to 1	7.88	2.63

Fill Ratio:

- The Ultrabond EGP is packaged in a 0.44 cubic foot kit and 2.0 cubic foot kit.
- Both of these kits can be mixed and used at a variable fill ratio (by weight) that ranges from the full packaged kit of 5.02 to 1 ratio (trowelable) down to 2.45 to 1 ratio (self-leveling). The fill ratio is the weight of the aggregate compared to the combined weight of the resin and hardener components.

6. Installation

Note: component "A" contains epoxy resin and is an irritant / sensitizer; component "B" contains amines and is a corrosive / sensitizer; component "C" contains sand (crystalline silica) and is a skin and eye irritant and is listed as a suspected human carcinogen by IARC. May cause respiratory tract irritation. Avoid breathing dust. Use of NIOSH approved respiratory protection is recommended. Prior to using the Ultrabond epoxy product, please consult the material safety data sheet for proper handling instructions.

I. Surface Preparation:

Fresh Concrete must be allowed to cure for a minimum of 28 days in accordance with ACI Standard 318 to allow for proper hydration and shrinkage prior to the placement of Ultrabond EGP.

Existing Concrete should be checked for cracks or other damages and repaired with the appropriate Adhesives Technology Corp. (ATC) repair material. Contact ATC Technical Service for the proper repair material.

Substrate and base-plate contact area must be clean, sound and free of standing water. Remove all dust, dirt, laitance, oils, grease, wax, curing compounds, or any other foreign contaminants by mechanical means (i.e. sandblasting or shot blasting).

Metal Surfaces to come in contact with the epoxy grout should be sandblasted to a white metal finish and wiped clean with solvent. Apply grout immediately to prevent re-oxidizing.

Manufactured In The U.S.A. by Adhesives Technology Corp.

Ia. Forming (for Machine Base Grouting):

When mixing to a flowable or pourable consistency, forming around the base-plate will be required to prevent grout leakage. Apply extra heavy coats of paste wax or a polyethylene film to the forms prior to erecting, to prevent adhesion of the grout. Completely seal all forms (liquid tight). Protect any exposed anchor bolts with polyethylene film or similar to prevent from bonding to the grout. Forms should be built to a minimum of 3/4" above the bottom of the base plate to ensure no voids or gaps are created during the grout placement. Forms should have 45° angle chamfer strips at all vertical corners in order to eliminate sharp corners. Base plates should have vent holes to prevent air pockets from developing during grout placement. For large pours, expansion joints should be installed to minimize the potential of cracking in the grout mix. Expansion joints should be placed every 3 - 4 feet (oil resistant closed cell foam is the optimum expansion joint material).

Ib. Saw-Cutting (for Patch & Spall Repairs in Concrete):

Saw-cut around the repair area approximately 1/2" deep and remove all deteriorated and unsound concrete with a chipping hammer. For large spalls, after saw-cutting, drill and epoxy rebar dowels into the concrete.

IIa. Mixing Instructions 0.44 cu ft kit: AGGREGATE MUST BE COMPLETELY DRY

Component 'A' (resin) and component 'B' (hardener) are packaged in separate containers and are both contained inside a 6.5 gallon pail, along with 3 bags of component 'C' (aggregate) totaling 43 lbs.

The 6.5 gallon pail is used as the mixing container for all three components. Mix as follows:

1. Remove all items from the pail
2. Pour the entire contents of both 'A' & 'B' components into the pail.
3. BEFORE adding the aggregate, mix for approximately 2 minutes with a low speed drill (300 - 400 rpm) with a mix paddle attachment (i.e. a jiffy mixer) keeping the paddle below the surface of the material to avoid entrapping air. Important note, any air that is incorporated into the grout mix will reduce the physical properties.
4. If making patch & spall repairs, set aside a small amount of mixed neat resin/hardner to use as a primer coat.
5. Slowly add the appropriate amount of component "C" (aggregate) to achieve the desired consistency and mix thoroughly and carefully scraping the sides and the bottom of the container to incorporate all the aggregate. Continue mixing until the aggregates are wetted out and entire content is uniform (approx. 3-4 minutes). DO NOT OVER MIX.

	Consistency Desired		
	Trowelable pounds	Plastic Flowable pounds	Pourable-Self Leveling pounds
Entire contents of pail A	6.82	6.82	6.82
Entire contents of bottle B	1.73	1.73	1.73
Aggregate #1	21.00	21.00	21.00
Aggregate #2	4.00	4.00	DO NOT ADD
Aggregate #3	18.00	DO NOT ADD	DO NOT ADD

IIb. Mixing Instructions 2.0 cu ft kit: AGGREGATE MUST BE COMPLETELY DRY

Component-A (resin) is packaged in a 5 gallon pail and Component-B (hardener) is packaged in a 1 gallon jug. Component-C (aggregate) is packaged in (4) 50 lb lined bags.

1. Pour the entire contents of component-B (hardener) into the 5-gallon pail (resin).
2. Mix for approximately 2 minutes with a low speed drill (300 – 400 rpm) with a mix paddle attachment (i.e. a jiffy mixer) keeping the paddle below the surface of the material to avoid entrapping air. Important note, any air that is incorporated into the grout mix will yield an inferior grout repair material.
3. Pour liquids into mortar mixer making sure to remove all resins from sides and bottom of pail (use spatula).
4. Add initial bag of aggregate prior to starting mixer.
5. Start mixer and slowly add remaining bags of aggregate to achieve the consistency desired. Continue mixing until aggregates are wetted out and mix is uniform in consistency. DO NOT OVER MIX.

	Consistency Desired		
	Trowelable	Plastic Flowable	Pourable-Self Leveling
Gallons of Resin	3.25	3.25	3.25
Gallons of Hardener	1.00	1.00	1.00

Manufactured In The U.S.A. by Adhesives Technology Corp.

III. Application:

Machine Base Grouting: Mix grout as described in procedures above. Pour the mixed grout into the prepared forms. Pour the grout from one location only to allow a unidirectional flow and to eliminate air entrapment. Use of a header box will ease the placement of the mixed grout. Base plates should have vent holes to prevent air pockets. Place enough grout in the form so that grout level is approximately 3/4-inch higher than the underside of the base plate to ensure proper seating. Check forms frequently for leaks. Plug any leaks with a hydraulic cement or putty.

Patch & Spall Repair: Mix grout as described above. Prime the surface of the repair area with Ultrabond 2100 or Ultrabond 5100 (depending on desired open time), then place the mixed repair grout (Ultrabond EGP mixed with aggregate) to the primed repair area. Place the grout underneath any installed rebar dowels. Place enough grout so that the grout level can be troweled level/flush with the concrete surface. Smooth out with trowel to create a nice smooth even surface. Note, volume of aggregate can be reduced to create a self leveling repair grout if necessary.

Clean Up: Clean tools and equipment with ketone solvents or xylene. Cured material must be removed mechanically.

Application Tips: When making repairs with a trowel grade epoxy grout (5.02 to 1 ratio by weight – aggregate / epoxy), priming the repair area surface with mixed neat resin (A & B component) will increase the bonding capacity. This is typically not necessary with a flowable consistency grout (3.92 to 1 ratio by weight) as there is sufficient mixed epoxy resin to wet the concrete substrate.

Important - Temperature:

Epoxy resins are temperature sensitive and all components (A, B & C) should be conditioned to 75 - 90°F (24° - 32°C.) for a minimum of 24 hours prior to mixing and placement. Temperatures below the stated range will increase viscosity, effecting the flow of the grouting material; temperatures above the stated range will decrease the viscosity and reduce the working time of the grout.

Sample Specification – Grout adhesive shall be a three component, 100% solids, epoxy system supplied in pre-measured containers. The grout adhesive material must have a minimum gel-time of 30 minutes, a minimum bond strength of 2,400 psi per ASTM C882, and a minimum compressive strength of 12,500 psi. Grout adhesive must have a minimum working time of 60 minutes. Shelf life must be a minimum of two years. Adhesive grout material shall be **Ultrabond EGP** manufactured by Adhesives Technology Corp., Pompano Beach, Florida.

BUILDING CODES

Installation of Ultrabond epoxy must comply with applicable local, state and national code requirements

SITE CONDITIONS

Material shall be delivered in original unopened containers and stored in a dry environment at a temperature between 40° and 90°F.

PRECAUTIONS

- Wear safety glasses
- Avoid prolonged contact with skin.
- Keep out of reach of children
- Do not take internally
- If Ingested seek medical attention immediately.
- Eye contact. Flush with water for at least 15 minutes. Call a physician immediately.

7. Availability and Cost

AVAILABILITY

Ultrabond epoxy is available through select distributors who can provide you with all of your construction needs. Please contact Adhesives Technology Corp. at (800) 892-1880 for a distributor near you.

COST

Cost information is available from your local distributor.

Manufactured In The U.S.A. by Adhesives Technology Corp.

8. Warranty

All warranties of the product listed herein, in the corresponding ATC catalog, and in any other current literature, expressed or implied, including warranties of merchantability and fitness for a particular purpose are specifically and expressly excluded, with the following exception: At its sole discretion, ATC will repair or replace any product which it considers to be defective in material or workmanship, excepting normal wear and tear within sixty (60) days from the date of purchase from ATC. ATC shall not be liable for any injury, loss or damage, direct, indirect, incidental or consequential or arising out of use of, misuse of, negligence, accident or inability to use any ATC product.

9. Technical Services

For technical support contact Adhesives Technology Corp. at (800) 892-1880.

10. Maintenance

None required.

11. Filing System

Additional product information and specifications are available either on line at www.atc.ws or contact Adhesives Technology at (800) 892-1880 to get copies mailed to you.

Actual user performance and data may differ due to variations of base material, installation procedures and personnel, weather conditions and other factors. Adhesives Technology Corp. reserves the right to change specifications or information printed in this Tech Data Sheet without notice or liability for these changes. Adhesives Technology Corp. will not be liable for any claim based on the use of data or other information printed in this Tech Data Sheet.

Manufactured In The U.S.A. by Adhesives Technology Corp.