



Gelbond Paste

Non-Sag, Epoxy Adhesive Binder

DESCRIPTION

Gelbond Paste is a two component, solvent-free, moisture insensitive, high strength, fast setting, structural epoxy adhesive. It is designed as a structural adhesive and binder for concrete, steel, masonry, wood and many other surfaces.

USES

Gelbond Paste is ideal for interior and exterior applications such as:

- Structural bonding of concrete, masonry, tile, stone, ceramics and other materials under damp or dry conditions
- Grouting dowels, anchors, rebar, bolts and metal anchors
- Structural grouting of cracks in concrete, masonry and wood
- Structural adhesive for bonding concrete, masonry, metal and wood

BENEFITS

- 1:1 ratio for ease of mixing
- Insensitive to moisture
- High modulus, high strength, bonder/adhesive
- Non-sag consistency for vertical and overhead applications
- Rapid strength gain
- Superior adhesion
- Consistent: Strict Quality Control testing and standards

STANDARDS

Gelbond Paste meets and exceeds the requirements of ASTM C-881 Type I, II, IV and V Grade 3, Classes B and C, Epoxy Resin Adhesives.

SURFACE PREPARATION

All surfaces in contact with **Gelbond Paste** shall be free of dirt, oil, grease, laitance and other contaminants that may act as bondbreakers. All unsound concrete should be removed to ensure a good bond. Use mechanical means such as abrasive blasting. Surface must be free of any moisture. Steel must be shotblasted to a white metal finish.

MIXING

For best results, mix thoroughly before each use. Do not over agitate or use high speed mixing equipment. Pre-mix each part individually before combining. Mix part A and B together in a 1:1 ratio by volume on low RPM for a total of 3 to 5 minutes to achieve desired consistency.

PHYSICAL PROPERTIES

ASTM C-881 SPECIFICATIONS		
TEST	RESULTS	ASTM SPECIFICATIONS
MIX Ratio (by volume)	1:1	N/A
ASTM C-881 Gel Time	35 Minutes	30 minutes min.
ASTM C-882 Bond Strength	2,232 psi	1,000 psi min.
ASTM C-882 Bond Strength	2,460 psi	1,500 psi min.
ASTM D-570 Absorption	0.63%	1.0% max. (I, II, IV, V)
ASTM C-881 Consistency	0 (No Flow)	1/4" flow max.
ASTM D-695 Compressive Strength	11,236 psi	5,000 psi (II) 8,000 psi (I, V) 10,000 psi (IV) min.
ASTM D-695 Compressive Modulus	250,100 psi	90,000 psi (II) 150,000 psi (I, V) 200,000 psi (IV) min.
ASTM D-638 % Elongation at Break	2.56%	1.0% min. (I, IV)
ASTM D-732 Shear Strength	3,550 psi	N/A
ASTM D-790 Flexural Strength	5,582 psi	N/A
ASTM C-884 Shrinkage	Pass	N/A
ASTM C-884 Thermal Compatibility	Pass	N/A

ASTM C-881 Type I, II, IV and V Grade 3, Classes B & C

COVERAGE

One gallon yields 231 in³ of epoxy gel adhesive. One gallon of adhesive mixed with one gallon oven-dried aggregate (by volume), yields 346 in³ of epoxy mortar.



Gelbond Paste

Non-Sag, Epoxy Adhesive Binder

PLACING

Work **Gelbond Paste** into the substrate to fill all gaps between mated or non-mated surfaces. Bondline thickness should not exceed 1/8" thickness.

To seal cracks and ports for injection grouting: Set injection ports appropriately along the crack line. Place the neat material over cracks and around ports to be injected. Allow material to reach full cure prior to injection.

To anchor dowels, bolts, pins or inserts: Drill hole to 1/8" diameter larger than insert. Embedment is typically 10-15 times the diameter of bolt or anchor. Proceed by filling the hole from the bottom up. Fill at least halfway with neat epoxy resin, insert anchor or dowel, then twist or spin the insert to secure good bond with the substrate.

For interior vertical and overhead patching: Work **Gelbond Paste** mortar into the substrate, filling the cavity or void. Avoid depths greater than 1½". Finish material to desired profile.

STORAGE

Protect from freezing. Store material in an interior, cool dry place above 45°F (7°C). Shelf life is one year in original, unopened container.

CLEAN-UP

Clean tools and equipment with warm, soapy water. After material has dried, it may be necessary to use solvents such as mineral spirits, toluene or xylene.

LIMITATIONS

In addition to the limitations already mentioned, please note the following. Epoxy resins are extremely temperature sensitive. Care should be taken to condition all components to between 75°F (24°C) and 90°F (32°C) for a minimum of 24 hours prior to mixing and placement. **Gelbond Paste** should not be applied to "green" concrete (less than 28 days old). Do not use for sealing cracks under hydrostatic pressure. Maximum lift thickness of epoxy mortar is 1½". Material is a vapor barrier after cure. Substrate must be tested for moisture vapor transmission prior to epoxy mortar application. Do not apply when the temperature of the concrete is below 40°F (4°C). Do not mix with any other products. Do not pour unused material back into original container. Pot Life: above 30 minutes.

REGULATORY

Read and follow application information, precautions and Material Safety Data Information.

HMIS

Health 3, Fire 1, Reactivity 1

VOC Content

0 g/L

AMINES, LIQUID, CORROSIVE, N.O.S. UN2735.

Keep away from heat, sparks and open flame.

CAUTION

Avoid contact with skin. Protective clothing is recommended. Contact areas should be thoroughly washed with soap and water. Avoid contact with eyes. Protective goggles are recommended in case of splashing. Flush eyes with water if contact occurs. Avoid ingestion of material. If ingestion occurs, contact a poison center or physician.

Component "A" IRRITANT

Component "B" CORROSIVE

Product is a strong sensitizer.

TECHNICAL SERVICE

US MIX Co.

112 South Santa Fe Drive

Denver, CO 80223

Tel: 303.778.7227 Fax: 303.722.8426

Web Site: www.usspec.com

NOTICE OF LIMITED WARRANTY US MIX Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales, people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price.

LIMITATION OF WARRANTIES AND LIABILITY Buyer assumes all risks associated with the use of this product. Manufacturer expressly disclaims all warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose and all other warranties otherwise arising by operation of the law, course of dealing, custom, trade or otherwise. Buyer's exclusive remedy if this product is proven to be defective is limited to refund of purchase price by the manufacturer. Refund shall only be available if the buyer notifies manufacturer in writing within thirty days following discovery of any defect. Written notice shall be forwarded to US MIX Co. at 112 South Santa Fe Drive, Denver, Colorado 80223. No claim can be made twelve months after purchase of the product. Twelve months after the purchase manufacturer's duties with respect to the product and limited warranty shall be presumed to have been satisfied. Manufacturer in no event is liable for consequential damages.