MIX2FIX® Bronze

Product description

MIX2FIX Bronze is a general-purpose, bronze-filled, non-corroding, two-part epoxy repair paste. It can be used to make tough, permanent repairs to bronze and other non-ferrous metals, ceramics, porcelain, concrete, wood, and some hard plastics.

Basic uses

MIX2FIX Bronze spreads easily and fills large and small gaps on both horizontal and vertical surfaces. When fully cured, conventional metal-working techniques can be used to machine, file, drill, sand, and paint the finished repair.

Use MIX2FIX Bronze to fill holes and cracks; repair worn, broken or damaged parts or components, such as marine bronze castings, valve bodies, fabrications, tanks, metal fittings and wood. It can also be used to level machinery; make small-scale templates, parts, models and molds; and as a general-purpose repair product for bronze parts, profiles, castings and plates.

Benefits

- Simple preparation.
- Spreads and applies easily.
- Can be shaped to required profile.
- Repositioning possible for up to 30 minutes.
- Does not shrink.
- Excellent chemical resistance.
- Good adhesion to a variety of metals, ceramics and hard plastics.

Application limitations

- Does not adhere to polyethylene, polypropylene or PTFE.
- See performance data for temperature limits.
- Do not apply at temperatures below 41°F (5°C).
- Not intended for structural applications.

Color

Cured color is Metallic Bronze.

Packaging

Available for private label. Packaging options to be determined. Minimum batch quantities apply.

How to use

Surface preparation: To achieve optimum adhesion, remove grease and dirt from surfaces using a solvent wipe. Lightly abrading or grit blasting the surface prior to cleaning will improve adhesion.

Mixing and application: Small quantities of product can be mixed by hand using a spatula or palette knife; larger quantities can be machine-mixed.

Wear impermeable gloves when mixing or handling uncured product. Measure out equal volumes or weights of the two components, using different utensils for each to avoid contamination. Use only the amount needed for the job at hand. Mix thoroughly for a minimum of 3 minutes until uniform in color.

Using a spatula or palette knife apply to the clean, dry surface and remove excess material before the paste has set. Mixed product should be used within 25 to 30 minutes to ensure maximum adhesion. Applying product after this time may impair bond strength.

Working time is 60 minutes at 68°F (20°C) but it is recommended that repairs be completed within 30 minutes to avoid disturbing the repair as it begins to set. To achieve a glossy finish, smooth the surface immediately after application with a knife moistened with a solvent such as acetone or mineral spirits.

Health precautions

- Contains Epoxy Resin. Epoxies are skin/eye irritants and known sensitizers. Direct product contact may cause an allergic reaction in some individuals. Avoid skin/eye contact. Wear impermeable gloves when mixing or handling uncured product.
- Inhalation of dust may be harmful. Avoid inhalation of dust. Wear dust mask and protective eyewear when sanding cured product.
- Ingestion of product may be harmful. Avoid ingestion.
- KEEP OUT OF THE REACH OF CHILDREN.

For additional health and safety information, consult a Safety Data Sheet.

MIX2FIX Bronze will start setting within an hour at 68°F (20°C), depending on volume and temperature: the greater the volume (or higher the temperature), the faster it will set. Allow 4 to 6 hours before handling and 48 hours before returning to service. It can be shaped, filed and polished after 48 hours. For advice on building multiple layers, please contact PSI's technical services department.

Shelf life: Two years from date of shipment when stored in dry storage area in unopened containers at 68°F (20°C).

Performance Data*

Properties	Results	Test Methods
Uncured Properties		
Composition	Filled epoxy resin	
Physical appearance	Paste	
Odor (hardener)	Faint amine smell (no odor when cured)	
Mixing ratio by weight or volume	1:1	
Viscosity	750,000 cps	
Mixed density	15 lb/gl (1.8 g/cm^3)	
Maximum thickness in one pass	<0.47 in (12 mm)	
Application temperature	50 to 95°F (10 to 35°C)	
Work life at 68°F (20°C)	1 hour	
Handling time at 68°F (20°C)	6 hours	
Return to service time at 73°F (23°C)	48 hours	
Cured Properties - 7-day cure at 73°F (23°C)		
Physical appearance	Metallic bronze solid	
Hardness, Shore D at 48 hours	75	ASTM D2240
Tensile strength	2,500 psi (17.5 MPa)	ASTM D925
Lap shear tensile strength on steel	2,175 psi (15 MPa)	ASTM D1002
On aluminum	1,300 psi (9 MPa)	ASTM D1002
Compressive strength	10,000 psi (69 MPa)	ASTM D695
Temperature limits		
Continuous	-4 to +248°F (-20 to +120°C)	
Intermittent	-4 to +302°F (-20 to +150°C)	
Chemical resistance	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions, dilute acids and bases	

* *Typical properties are for information only, not for purposes of specification. The data above represents product performance in ideal laboratory conditions. Individual users' experience may vary depending on application conditions.*

Contact Details

Polymeric Systems, Inc., is a part of Whitford Worldwide.
For more information, please contact Polymeric Systems or Whitford Ltd. at:

Polymeric Systems, Inc.
47 Park Avenue
Elverson, PA, USA 19520
Tel: [1] (610) 286-2500
Email: sales@polymericsystems.com
Website: polymericsystems.com

Whitford Ltd.
11 Stuart Road, Manor Park
Runcorn, Cheshire, UK WA7 1TH
Tel: [44] (0) 1928 571000
Email: salesuk@whitfordww.com
Website: whitfordww.com

Toll Free: 800-CAULK IT (800-228-5548)

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