



MIX2FIX[™] High Temperature

Product description

MIX2FIX High Temperature is a room-temperature-curing, industrial epoxy paste for bonding and repairing materials to be exposed to continuous service temperatures up to 450°F (232°C).

Basic uses

MIX2FIX High Temperature spreads easily to fill large and small gaps on both horizontal and vertical surfaces. It can be successfully applied to metal, ceramics, and tiles.

Use MIX2FIX High Temperature to repair and coat iron pipes, tanks, tools, equipment, molds, castings, ductwork, stripped threads, and other projects to be exposed to elevated temperatures; to bond metals; and to fill cracks and holes.

Benefits

- Solventless.
- Low odor.
- Long pot life.
- Service temperature -40 to +450°F (-40 to +232°C).
- Good adhesion to a variety of surfaces.
- Can be shaped, sanded, machined, and formed to the required profile and finish.

Application limitations

- Does not adhere to polyethylene, polypropylene or PTFE.
- Not intended for use in applications exceeding 500°F (260°C) exposure.
- Minimum application temperature is at or above 41°F (5°C).
- Not intended for structural applications.
- User should conduct testing to determine suitability for any specific application.

Color

Cured color is Black.

Packaging

Packaging options available on request. Minimum batch quantities apply.

How to use

Surface preparation: All surfaces should be clean, dry and free from all contamination, particularly oils and greases which will impair bond and

could lead to premature failure. Ideally surfaces should be abraded with a fine emery cloth followed by a solvent wipe with dry acetone or commercially available degreaser. Apply mixed product immediately after cleaning to avoid possible post-cleaning contamination.

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. Stir each side before using. Measure out 4 parts resin and 1 part hardener by volume using different utensils for each to avoid contamination. Use only the amount needed for the job at hand. Mix together thoroughly for a minimum of 3 minutes until uniform in color.

Mix and apply the product at temperatures between 41°F and 98.6°F (5°C and 37°C). At temperatures below 41°F (5°C) the product becomes stiff and difficult to mix properly. At temperatures above 98.6°F (37°C) the curing reaction is accelerated and application is difficult to complete before the product gels.

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

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. MIX2FIX High Temperature 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. Curing at higher temperatures (above

150°F/65°C) will provide a stronger bond.

Allow 6 hours before handling and 24 hours before returning to service. The application can be shaped, filed and polished after 24 hours.

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	Two-part epoxy resin	
Physical appearance	Paste	
Odor (hardener)	Slight amine smell (no odor when cured)	
Mixing ration by volume	4:1	
Viscosity	650,000 cps	
Mixed density	16.26 lb/gal (1.95 g/cm ³)	
Application temperature	50 to 95°F (10 to 35°C)	
Work life at 75°F (24°C)	1 hour	
Handling time at 75°F (24°C)	6 hours	
Cure time to full cure at 75°F (24°C)	24 hours	
Cured Mechanical Properties - 24-hour cure at 68°F (20°C)		
Physical appearance when cured	Black solid	
Hardness, Shore D at 68°F (20°C)	80	ASTM D2240
Tensile strength at 68°F (20°C)	4,000 psi (28 MPa)	ASTM D925
Lap shear tensile strength		
steel to steel at 68°F (20°C)	1,000 psi (7 MPa)	ASTM D1002
Compressive strength at 68°F (20°C)	8,000 psi (56 MPa)	ASTM D695
Tg by DSC	150°F (65°C)	
Temperature limits		
Continuous	-40 to +450°F (-40 to +232°C)	
Intermittent	-40 to +500°F (-40 to +260°C)	
Chemical resistance	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions, and 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.		

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