



Product description

MIX2FIX FC Steel is a fast-curing, general-purpose, two-part epoxy paste with a high steel-alloy particle content (40%). It can be used to make tough, permanent repairs that will be rust-free and can be machined like steel.

Basic uses

MIX2FIX FC Steel spreads easily to fill large and small gaps on both horizontal and vertical surfaces. It can be successfully applied to metals, porcelain, ceramics, wood, concrete and some rigid, thermosetting plastics (contact PSI for guidance on plastic types). When fully cured, conventional metalworking techniques can be used to machine, tap, drill, file, sand, and paint the finished repair.

MIX2FIX FC Steel is ideal for emergency repairs. Use it to fill holes and cracks; repair broken, damaged or worn parts such as low-pressure pipes, castings, valves, tanks, fabrications, wood and metal fittings, shafts, housings, keyways and flanges; repair cast-steel plates; level machinery; make small-scale repairs to metal components; and make templates.

Benefits

- Simple preparation (1:1 mixing ratio).
- Spreads easily to fill large and small gaps.
- Can be shaped to required profile.
- Short worklife for rapid repairs and fast return to service.
- Can be used on virtually any surface.
- Good adhesion to a variety of metals, ceramics and hard plastics.
- Does not shrink.

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 Gray.

Packaging

Available for private label. Packaging options to be determined. 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 would 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: MIX2FIX FC Steel Hardener component will skin in contact with air. Any product skin should be removed and discarded before use. Mix each side before using.

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 together with a spatula for a minimum of 1 minute until uniform in color.

Use a spatula to apply to clean, dry surface and remove excess material before the paste begins to set. It is recommended that repairs be completed within 1 to 2 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

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.

solvent such as acetone or mineral spirits.

MIX2FIX FC Steel will start to set within 5 minutes at 68°F (20°C), depending on volume or temperature: the greater the volume (or higher the temperature), the faster it will set. Allow 1 hour before handling, and 24 hours before returning to service. After 24 hours the application can be drilled, tapped, filed or sanded to shape and

painted. For advice on building multiple layers, please contact PSI's technical services department.

Shelf life: One year from date of shipment when stored in dry storage area in original, unopened container at 68°F (20°C). To avoid contamination, do not return unused product to containers.

Performance Data*		
Properties	Results	Test Methods
Uncured Properties		
Composition	Steel-filled epoxy resin	
Physical appearance	Paste	
Odor (hardener)	Strong sulphurous smell (no odor when cured)	
Mixing ratio by weight and volume	1:1	
Viscosity	7,000,000 cps	
Mixed density	20 lb/gl (2.5 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)	5 minutes	
Handling time at 68°F (20°C)	1 hour	
Return to service time at 73°F (23°C)	24 hours	
Cured Properties - 7-day cure at 73°F (23°C)		
Physical appearance when cured	Metallic gray solid	
Hardness, Shore D	75	ASTM D2240
Tensile strength	4,750 psi (33 MPa)	ASTM D925
Lap shear tensile strength on steel	1,740 psi (12 MPa)	ASTM D1002
On aluminum	1,450 psi (10 MPa)	ASTM D1002
Compressive strength	7,250 psi (50 MPa)	ASTM D695
Temperature limits		
Continuous	-4 to +176°F (-20 to +80°C)	
Intermittent	-4 to +248°F (-20 to +120°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

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