

Product description

SOLUTION 50 Steel Repair Compound is a hand-mixable, steel-reinforced, non-rusting epoxy putty that quickly repairs or rebuilds anything made of steel. After mixing it forms an industrial-strength polymer compound that can be molded into shapes or used to build up, patch, and repair steel components. Each handy stick contains pre-measured portions of activator and base throughout — just cut, mix, and apply. No measuring or mixing tools are necessary. The consistency (like modeling clay) eliminates drips and runs and facilitates adhesion to the substrate.

Basic uses

SOLUTION 50 Steel Repair Compound can be used in many industrial and home maintenance applications. Use it to repair leaking iron pipes and tanks; rebuild stripped threads; fill blowholes, cracks and voids in metal; for molds, patterns and casting; and to repair rust-damaged equipment bodies, metal gutters, downspouts, and ductwork. Solution 50 can also be used to create prototype parts, form custom tools and handles, fabricate missing machine parts, and anchor machines.

Benefits

- Suitable for interior and exterior use.
- Safe for use with potable water.
- Contains no solvents or VOCs.
- Won't shrink or pull away.
- Non-flammable; releases no noxious fumes.

Application limitations

- Does not adhere to polyethylene, polypropylene, or PTFE.
- Not intended for use in structural applications.

Color

Dark metallic gray.

How to use

Surface preparation: To achieve optimum adhesion, surfaces must be clean and free of oil, grease, corrosion, and dirt. Scuffing or sanding the surface prior to cleaning helps ensure a good bond.

Mixing and application: Wear impervious gloves when mixing or handling uncured product. Twist or cut off required amount with gloved fingers, then mix by kneading to a uniform color. Use damp fingers for easier mixing and application. If mixing is difficult, warm Solution 50 to room temperature or slightly above.

Apply to the repair surface within 2 minutes of mixing. Force into any cracks or holes. When applying to a damp, wet, or slowly leaking area, work the mixed material forcefully into the surface and apply pressure until adhesion begins to take effect. Strike off excess material before hardening begins, preferably with a tool moistened with clean water. For a smooth cured appearance, rub with water or a damp cloth prior to hardening.

Solution 50 has a work life of 3 to 5 minutes. Functional cure occurs in 60 minutes. The application can then be drilled, tapped, machined, ground, filed, and painted.

Shelf life: Two years minimum from date of shipment when stored in original, unopened container in a dry area at temperatures below 75°F (24°C).

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.
- Turn off power when doing electrical repairs.
- **KEEP OUT OF THE REACH OF CHILDREN.**

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

Performance Data*

Properties	Results	Test Methods
Uncured Properties		
Non-volatile content	100%	
Density	18.5 lb./gl (2.2 g/cm ³)	
Work life at 75°F (24°C)	3 to 5 minutes	
Functional cure	1 hour	
Cure time to full cure at 70°F (21°C)	24 hours	
Cured Mechanical Properties		
Shore D hardness at full cure (24 hrs.)	80	ASTM D2240
Lap shear tensile strength		
On steel, 1" x 1" x 1/16" (25.4 x 25.4 x 1.62 mm)	900 psi (6.2 MPa)	ASTM D1002
Compressive strength	8,000 psi (55 MPa)	ASTM D695
Shrinkage	<1%	ASTM D2566
Temperature limits		
Continuous	-40 to +250°F (-40 to +121°C)	
Intermittent	-40 to +300°F (-40 to +149°C)	
Chemical resistance	Resistant to hydrocarbons, ketones, esters, alcohols, halocarbons, aqueous salt solutions, and dilute acids and bases	
Cured Electrical Properties		
Electrical resistance	30,000 megohms-cm	ASTM D257
Dielectric strength	300 volts/mil	ASTM D149
<i>*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.</i>		

Contact Details



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