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## Technical Data Sheet

# Permatex® Steel Weld® Epoxy

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### PRODUCT DESCRIPTION

Permatex® Steel Weld® epoxy is a premium two part, high strength, metal-filled epoxy adhesive system. Permatex® Steel Weld® epoxy can be drilled, threaded, and machined once fully cured. It repairs, fills and bonds most metal surfaces. It is resistant to most shop fluids including fuels, oil, water, and solvents.

### PRODUCT BENEFITS

- Will not shrink
- No clamping needed
- Non-flammable
- Dark grey color
- Impact resistant
- Water resistant
- High temperature resistant
- Useable in 30 minutes

### TYPICAL APPLICATIONS

- Aluminum
- Brass
- Chrome
- Copper
- Iron
- Stainless Steel
- Steel
- Cast

### DIRECTIONS FOR USE

1. Protect work area from accidental spills.
2. Surface must be clean, dry and free of grease & oil.
3. Roughen surfaces with sandpaper or other abrasives.
4. Use a sharp blade to cut off the tips of both nozzles.
5. Depress plunger on syringe or squeeze out of tubes equal amounts of resin and hardener. Thoroughly mix resin and hardener on a clean discardable surface for at least one (1) minute or until uniform in color.
6. Apply to surfaces being repaired. Assemble parts immediately. Remove excess epoxy immediately.
7. Allow bond to set for the fixture time before handling or moving. Product fully cures in 24 hours.

**NOTE: Permatex® Steel Weld® will not bond polyethylene and polypropylene plastics.**

### For Cleanup

1. For any cleanup, use isopropyl alcohol before the material is allowed to dry.
2. Clean hands with Permatex® Fast Orange® hand cleaner or soap and water.

### PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Epoxy and Mercaptan/Amine Resins
Mix Ratio	1:1
Appearance	
Resin	Black
Hardener	Off white/White
Odor	Mild
Specific Gravity	1.75 - 1.85
Flash Point, TCC	>300°F
Viscosity	Paste

### CURING PROPERTIES

	Working Time	Fixture Time
84109	4 – 5 minutes	8 – 10 minutes
84209	4 – 5 minutes	8 – 10 minutes

Final color	Grey
Temperature range	-60°F to +300°F(Continuous) +350°F(Intermittent)

### GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as an adhesive for chlorine or other strong oxidizing materials.**

**For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).**

### ORDERING INFORMATION

Part Number	Container Size
84109	4 min. Steel Weld® Epoxy, 0.84 fl. oz. dual syringe, carded
84209	4 min. Steel Weld® Epoxy, 2 – 1oz. tubes, carded

### STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container.

**NOTE**

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