



# Technical Data Sheet

## Permatex® Steel Weld® Epoxy Products

### PRODUCT DESCRIPTION

S.I.N.: 834-300

Permatex® Steel Weld® epoxies are two part, high strength, cold welding adhesives. Steel Weld® epoxies can be used to bond many types of metals. They are water and solvent resistant and are available in dual syringes or tubes.

### PRODUCT BENEFITS

- Will not shrink
- No clamping needed
- Fills gaps
- Dark grey color
- Impact resistant
- Water resistant
- High temperature resistant
- Cured product can be drilled, threaded, machined, and painted

### 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 moving.

#### 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 or Amine Resins
Mix Ratio	1:1
Appearance	Black
Resin	Off white/White
Hardener	Mild
Odor	1.75 - 1.85
Specific Gravity	>300°F
Flash Point, TCC	Paste
Viscosity	

### 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. Multi-Metal Epoxy, 0.84 fl. oz. dual syringe, carded
84209	4 min. Multi-Metal 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.