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## **Technical Data Sheet**

# Permatex® Cold Weld Bonding Compound

AAM Revised 01/19

#### PRODUCT DESCRIPTION

Permatex® Cold Weld Bonding Compound is a general purpose two-part, fast curing, high strength, metal-filled epoxy that can be drilled, threaded, and machined once fully cured. It repairs, fills and bonds to iron, steel, brass, bronze, aluminum, and copper and it is resistant to most shop fluids including fuels, oil, water, and solvents.

#### **PRODUCT BENEFITS**

- No heating required
- Holds in 10 minutes
- Useable in 30 minutes
- Good moisture resistance
- Withstands extreme temperatures
- Non-flammable

#### **TYPICAL APPLICATIONS**

- · Cracked transmission cases
- Chipped heads
- Rear end castings
- Cracked blocks
- · Cracked intake manifolds
- Damaged keyways
- Split stampings

#### **DIRECTIONS FOR USE**

- Before starting, make sure your work area is protected from accidental spills. Surfaces must be clean, dry and free of grease and oil.
- 2. Roughen smooth surfaces to be repaired with sandpaper.
- Apply in ventilated area. Vapors may irritate eyes and nose.
- Squeeze out equal amounts of bonding agent and curing agent.
- 5. Mix together thoroughly until color is uniform.
- 6. Apply immediately to both surfaces and press together. Remove excess glue at once.
- Allow bond to set for 10 minutes before moving or handling.
- After 24 hours, typical shear strength on steel is 3000 PSI.
- Cure time will be slower in colder weather.

#### For Cleanup

- Cleanup must be completed before curing is complete.
  Use acetone or mineral spirits for cleanup.
- Clean hands with Permatex<sup>®</sup> Fast Orange<sup>®</sup> hand cleaners.

### PROPERTIES OF UNCURED MATERIAL

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Chemical Type	Epoxy, amine resins
Appearance	Resin – black
	Hardener - beige
Odor	Mild
Specific Gravity (mixed)	1.79
Flash Point, TOC, °F	>400

#### **TYPICAL CURING PERFORMANCE**

Permatex<sup>®</sup> Cold Weld Bonding Compound has a working time of 4 to 6 minutes, fixture time of 8-10 minutes, and fully cures in 24 hours.

#### TYPICAL ENVIRONMENTAL RESISTANCE

Temperature Resistance	Typical Values
Minimum, °F (°C)	-60 (-51)
Continuous, °F (°C) Maximum	300 (149)
Intermittent, °F (°C) Maximum	350 (177)

#### **Chemical / Solvent Resistance**

The product retains effective properties when in contact with water, oil, fuels, and most solvents. Not recommended for long term exposure to chemicals and solvents.

NOTE: Permatex<sup>®</sup> Cold Weld Bonding Compound will not bond polyethylene and polypropylene plastics.

#### **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

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

#### ORDERING INFORMATION

Part Number	Container Size
14600	2-1 oz. tubes, carded

#### STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 46° and 82°F (8° and 28°C) 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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