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Technical Data Sheet

Permatex® High Temp

AAM Revised 01/19

PRODUCT DESCRIPTION

Permatex® High Temp is a two-part, hand kneadable, putty type industrial strength epoxy in stick form which is used to bond and repair metallic materials that will be exposed to high temperatures. Contrasting brown and white colored materials are mixed together to form a uniform golden-brown titanium color to indicate thorough mixing. After 8 hours, High Temp can be drilled, sanded, threaded, machined or painted and it is resistant to water and most solvents. **Permatex® High Temp does not bond to polyethylene and polypropylene, and is not for structural applications.**

PRODUCT BENEFITS

- Easy to use
- Bonds to most metals
- No heating required
- Sets in 1 hour
- Cures and useable in 8 hours
- Good moisture resistance
- Withstands high temperatures
- Cured material will not shrink
- Non-flammable
- Contains no solvents or VOC's

Typical repair applications:

- Engine Blocks
- Tail Pipes
- Exhaust Manifolds
- Machinery
- Mufflers
- Many Other High Temperature Repairs

DIRECTIONS FOR USE

1. Before starting, make sure your work area is protected from accidental spills. Surfaces must be clean, dry and free of grease and oil. **Note: Wear impervious gloves when mixing or handling uncured High Temp.**
2. Roughen smooth surfaces to be repaired with sandpaper or mechanically.
3. Cut off required amount of epoxy stick and knead with fingers to a uniform color. This should take no longer than two minutes. **Note: After mixing, High Temp has a 1 hour work life.**
4. Apply to the surface to be repaired. Force into cracks or holes to be filled. Excess material can be removed, before it is cured, with a tool wetted with clean water. **Note: Heating High Temp or applying to warm surfaces will accelerate the cure.**
5. On wet or damp surfaces, work material into area

forcefully and hold in place until adhesion begins. Do not use hands to hold in place as heat is given off during cure.

6. After 1 hour, the epoxy will harden.
7. After 8 hours, the cured material can be drilled, sanded, tapped, threaded, machined or painted.

For Cleanup

1. Cleanup must be completed before the product has cured. Use acetone or mineral spirits for project/tool cleanup.
2. Clean hands with Permatex® Fast Orange® hand cleaners.

PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Epoxy and mercaptan resins
Appearance	brown outside, white inside
Odor	Slight mercaptan
Specific Gravity (mixed)	1.90 g/ml
Flash Point, SCC, °F	>200
Mix Ratio	1:1
Tensile Strength, steel, 24 hours at 75°F	250 psi
Tensile Strength, steel, 24 hours at 150°F	750 psi

TYPICAL CURING PERFORMANCE

Permatex® High Temp has a set up time of 1 hour, functionally cures in 8 hours, and fully cures in 72 hours.

TYPICAL ENVIRONMENTAL RESISTANCE

Temperature Resistance	Typical Values
Continuous, °F Maximum	-40°F to 450°F
Intermittent, °F Maximum	-40°F to 500°F

Chemical / Solvent Resistance

This product retains effective properties when in contact with water, hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions, and dilute acids and bases.

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
84333	2 oz. High Temp with vial, carded

STORAGE

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