

## TECHNICAL DATA SHEET

## STAINLESS STEEL PUTTY

PRODUCT: H-800 1 lbs./454grams Stainless Steel Putty Repair Kit Stock Number 00800

**DESCRIPTION:** A two-component epoxy formulation highly filled with carefully selected stainless steel particles, modified curing agents, and special high quality additives to provide maximum strength, durability, and ease of application. Will adhere to vertical surfaces and is easily machineable with standard metalworking tools. Will not rust or corrode.

<u>APPLICATIONS</u>: Universally used for repairing pipes, tanks, valves, and other equipment. Often used in the food, beverage and chemical industries.

PHYSICAL PROPERTIES:	
Color	Metallic Grey
Pot Life 1 lb. @ 24°C (75°F)	45 minutes
Viscosity	Non-sagging Paste
Mixed Viscosity	350,000 cps
Cure Shrinkage	0.0005 in/in
Temperature Resistance	250°F (121°C)
Hardness (Shore, ASTM D 1706)	85D
Cured Density	11.9 cu. in. per lb.
Coefficient of Thermal Expansion	$65 \text{ X } 10^{-6} \text{ cm/cm/°C}$
Compression Strength (ASTM D 695)	8,100 psi (59 M Pa)
Tensile Strength (ASTM D 638)	4,100 psi (24 M Pa)
Flexual Strength (ASTM D790)	6,300 psi (43 M Pa)
Compression Modulus(ASTM D695)	2.70 X 10 <sup>5</sup> psi (1.8 X 10 <sup>3</sup> M Pa)
Thermal Conductivity(ASTM C 177)	$1.37 \text{ X} 10^3 \text{ cal-cm/sec.cm}^2 ^{\circ}\text{C}$
Dielectric Strength(ASTM D 149)	30 volts/mil
Adhesive Tensile Shear (ASTM D 1002)	2,410 psi

CHEMICAL RESISTANCE:	
Hydrochloric Acid 10%	Very Good
Hydrochloric Acid 50%	Good
Sulfuric Acid 10%	Very Good
Sulfuric Acid 50%	Good
Water	Very Good
Ammonia	Very Good
Sodium Hydroxide 10%	Very Good
Gasoline, Oil, Kerosene	Very Good
Mineral Spirits	Very Good
Toluene	Good
Methanol	Fair
MEK	Fair
Propylene Glycol	Very Good

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**DIRECTIONS:** Surfaces must be clean, dry, and preferably roughened for maximum adhesion.

Add all of the hardener to all of the resin in the resin container. For smaller portions, dole out 1 part hardener to 3 parts resin by volume (1 to 9 parts by weight).

<u>Mix thoroughly for 5 minutes</u>, making certain that all of the hardener comes in contact with all of the resin. While mixing, be sure to scrape the sides and bottom of the container.

Apply the mixed compound with putty knife, spatula, or similar tool. The tool may be moistened with water to provide a smooth finish to the HY-POXY.

Thicker layers harden faster than thinner layers. This chemical hardening incurs negligible shrinkage in sharp contrast to air drying compounds which shrink and lose much of their strength when the volatile materials evaporate. Hardening of H-800 is accelerated by exposure to heat, whether it be higher room temperature, hot sun, or a heat lamp. A direct flame should not be used.

After hardening, H-800 can be drilled, tapped, filed, sawed, or machined just like metal.

**COVERAGE:** 1lb. covers approximately 140 square inches at <sup>1</sup>/<sub>8</sub>" thickness.

**<u>CURING TIME</u>**: At 75°F (24°C) a <sup>1</sup>/<sub>2</sub>" (12.5mm) layer of HY-POXY STAINLESS STEEL PUTTY will be hard in approximately 45 minutes. FULL cure times are as follows:

<b>TEMPERATURE</b>	WORKING TIME	<u>FULL CURE TIME</u>
60°F (16°C)	90 Minutes	<b>32 Hours</b>
75°F (60°C)	45 Minutes	16 Hours
90°F (32°C)	<b>25 Minutes</b>	8 Hours

## HY-POXY STAINLESS STEEL PUTTY will not cure properly below 60°F (16°C).

**<u>NON-WARRANTY</u>**: We can accept no responsibility or liability for lack of results because the storage, handling, and application of the compound is beyond our control.