

## TECHNICAL DATA SHEET

## WET SURFACE PUTTY

**PRODUCT:** H-600 1 lb. Repair Kit Stock Number 00600

**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 a WET SURFACE and is easily machineable with standard metalworking tools. Will not rust or corrode.

**<u>APPLICATIONS</u>**: Originally developed for underwater repairs, it is also used for repairing pipes, tanks, valves, and machinery in highly humid environments where it is impossible to completely dry the surface.

| PHYSICAL PROPERTIES:              |  |  |
|-----------------------------------|--|--|
| Color                             | Dark 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 X 10 <sup>⁻ 6</sup> cm/cm/⁰C                                  |  |
| 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 X 10 <sup>3</sup> cal-cm/sec.cm <sup>2</sup> <sup>o</sup> C |  |
| Dielectric Strength(ASTM D 149)   | 30 volts/mil   |  |

| 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 6 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-600 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-600 can be drilled, tapped, filed, sawed, or machined just like metal.

**COVERAGE:** 1lb. covers approximately 80 square inches at ¼" thickness.

**<u>CURING TIME</u>**: At 75°F (24°C) a <sup>1</sup>/<sub>2</sub>" (12.5mm) layer of HY-POXY Wet Surface putty will be hard in approximately 40 minutes. FULL cure times are as follows:

| <b>TEMPERATURE</b> | WORKING TIME | HARDENING TIME | FULL CURE TIME |
|--------------------|--------------|----------------|----------------|
| 60°F (16°C)        | 90 Minutes   | 12 Hours       | 32 Hours       |
| 75°F (60°C)        | 40 Minutes   | 4 Hours        | 16 Hours       |
| 90°F (32°C)        | 25 Minutes   | 2 ½ Hou        | rs 8 Hours     |

## HY-POXY WET SURFACE PUTTY will not cure properly below 40°F (4°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.

WET SURFACE PUTTY H-600 TDS