



HYPOXY STEELBOND®

STEEL FILLED POLYMER COMPOUND

PRODUCT: H-100 1Lb (454 gms) Pack.

DESCRIPTION: A two-component Polymer formulation highly filled with carefully selected pure steel fillers, 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 machinable with standard metalworking tools and equipment.

APPLICATIONS:

HYPOXY STEELBOND® hardens to a blackish gray metallic mass and adheres soundly to all grades of steel castings.

A permanent, non-shrinking metallic filler for repair of blow holes in castings. Ideal for building up metal surfaces. Widely used for fast, inexpensive, but accurate drill jigs and placement fixtures.

HYPOXY STEELBOND® is especially formulated for Repair of Pin holes, Blow holes, Surface irregularities in Steel Castings.

Fill up porosity in cast components.

Repair of damaged threads in cast components.

Repair of surface & subsurface cracks in Aluminum & Steel castings.

HYPOXY STEELBOND® is unaffected by water, oil and gasoline and widely used by professional tradesman worldwide.

HYPOXY STEELBOND® cured deposit can be machined, sanded, drilled and tapped which makes it a popular choice for automotive, plumbing and HVAC repairs.



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 ⁻⁶ cm/cm/°C
Compression Strength (ASTM D 695) -:	8,100 psi (56 M Pa)
Tensile Strength (ASTM D 638) -:	4,100 psi (28 M Pa)
Flexural Strength (ASTM D 790) -:	6300 psi (43 M Pa)
Dielectric Strength -:	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



SURFACE PREPRATION :

Surfaces must be clean, dry, and preferably roughened for maximum adhesion. Proper surface preparation is critical to the long term performance of this product. The exact requirements for surface preparation vary with the severity of the application, expected service life, and the initial substrate condition.

Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75-125 microns (3 to 5 mils). This is normally achieved by initial cleaning, followed by abrasive blasting to a cleanliness of white metal (SA3 / SSPC-SP5) or Near White Metal (SA 2 ½ SSPC SP 10) followed by rinsing with an organic solvent which evaporates leaving no film residue. Grinding or machining to a rough surface profile followed by rinsing with solvent is acceptable although a subsequent lowering in adhesion may result.

MIXING :

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).

Mix thoroughly, 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®. Since HY-POXY® will not adhere to polyethylene, a piece of that plastic can be placed on the uncured HY-POXY® and removed after the material cures to leave a very smooth finish.

COVERAGE:

1lb. (454g) STEELBOND® kit covers approximately 47sq. inches (303sq.centimeters) at ¼”(6.35mm) thickness.

CURING TIME:

At 75°F (24°C) a ½” (12.5mm) layer of HY-POXY® STEELBOND® putty will be hard in approximately 4 hours. FULL cure times are as follows:

TEMPERATURE

60°F (16°C)

75°F (24°C)

90°F (32°C)

WORKING TIME

90 Minutes

45 Minutes

25 Minutes

FULL CURE TIME

32 Hours

16 Hours

8 Hours.

SAFETY :

Before using any product, review the appropriate Material Safety Data Sheet (MSDS). Follow standard confined space entry and work procedures, if appropriate.

NON-WARRANTY:

We can accept no responsibility or liability for lack of results because the storage, handling, and application of the compound is beyond our control.

PL CALL IN YOUR LOCAL AUTHORISED DEALER TO GET FULL ADVANTAGE OF PRODUCT TRAINING AND KNOW HOW TO MAKE MORE USE OF HY POXY PRODUCTS



HYPOXY SYSTEMS INDIA PVT. LIMITED

NEW DELHI – 110075. INDIA.

Mobile :- +91 9810247468, +91 9810352249

Tel. :- +91 11 28082018, Fax :- +91 11 45629850

E mail :- salesindia@hypoxy.com

Web site :- www.hypoxy.com