



HYPOXY STEELFAST®

RAPID CURE STEEL FILLED POLYMER COMPOUND

PRODUCT: H-120 1Lb (454 gms) Pack.

DESCRIPTION: A two-component fast setting 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 cure in 5 minutes time & adhere to vertical surfaces and is easily machinable with standard metal working tool.

APPLICATIONS:

HYPOXY STEELFAST cures to a gray metallic mass in 4 minutes time and adheres soundly to all grades of steel casting which makes it most suitable for fast repair.

HYPOXY STEELFAST 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.

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

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

HYPOXY STEELFAST 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) -:	5 minutes
Viscosity -:	Trowelable Paste
Mixed Viscosity -:	330,000 cps
Cure Shrinkage -:	0.0003 in/in
Temperature Resistance -:	195°F (90°C)
Hardness (Shore, ASTM D 1706) -:	75D
Cured Density -:	13.2 cu. In. per lb.
Coefficient of Thermal Expansion -:	60 X 10 ⁻⁶ cm/cm/°C
Compression Strength (ASTM D 695)	5,900 psi (41 M Pa)
Tensile Strength (ASTM D 638)	2,200 psi (15 M Pa)
Adhesive Tensile Shear (ASTM D 1002) -:	2,615 psi

CHEMICAL RESISTANCE:

Hydrochloric Acid 10% -:	Very Good
Hydrochloric Acid 50% -:	Unsatisfactory
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 -:	Unsatisfactory
MEK -:	Fair
Propylene Glycol -:	Very Good



SURFACE PREPARATION :

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 :

The working time for the H-120 is only 5 minutes so all preparations must be completed prior to mixing.

Add all of the hardener to all of the resin in the resin container. For smaller portions, dole out 1 part hardener to 1.5 parts resin by volume (1 to 4 parts by weight).

Mix thoroughly without interruption for 2 minutes, 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.

CURING TIME:

At 75°F (24°C) a ½" (12.5mm) layer of HY-POXY STEELFAST putty will be hard in approx. 4 hours.

FULL cure times are as follows:

TEMPERATURE	WORKING TIME	FULL CURE TIME
40°F (4°C)	12 Minutes	5 Hours
60°F (16°C)	7 Minutes	2 Hours
75°F (24°C)	5 Minutes	1 Hours
90°F (32°C)	3 Minutes	1/2 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



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