



HYPOXY ALUM BOND

ALUMINIUM REPAIR PUTTY

PRODUCT: H- 45 2 Oz/ 56.8 gms Pack. & H- 450 6.5 Oz / 184 gms Pack

DESCRIPTION: A two-component epoxy formulation highly filled with carefully selected pure Aluminium 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 machineable with standard metalworking tools and equipment.

APPLICATIONS:

HYPOXY ALUM BOND hardens to a gray metallic mass and adheres soundly to almost every material except for polyethylene.

A permanent, non-shrinking Aluminium metallic filler for blow holes in castings. Ideal for building up metal surfaces.

HYPOXY ALUM BOND is especially formulated for repairing valves, pumps, castings, water jackets, radiators, Pipe, Tanks, Engine Blocks etc.

ALUM BOND is unaffected by water, oil and gasoline and widely used by Professional tradesman worldwide.

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

ALUM BOND has infinite uses filling gaps and holes on plumbing, electrical, auto, HVAC and industrial applications where a non-magnetic aluminum finish is desired.

IDEAL FOR REPAIRING AL CASTING, AL HEADS, HVAC PIPES, RADIATORS, TANKS, VALVES, PITTED AL WHEELS, OTHER AL PARTS & DIES.

ALUM BOND® have been specifically formulated to be used in HVAC applications for the repair of air conditioning system components, aluminum castings, machinery and equipment. It also is great for automotive and plumbing repairs.



PHYSICAL PROPERTIES:

Color -:	Grey
Pot Life 1 lb. @ 24°C (75°F) -:	45 minutes
Viscosity -:	Non-sagging Paste
Mixed Viscosity -:	330,000 cps
Cure Shrinkage -:	0.0005 in/in
Temperature Resistance -:	250°F(121°C)
Hardness (Shore, ASTM D 1706) -:	83D
Cured Density -:	17.5 cu. In. per lb.
Coefficient of Thermal Expansion-:	40 X 10 ⁻⁶ cm/cm/°C
Compression Strength (ASTM D 695) -:	8,600 psi (59 M Pa)
Tensile Strength (ASTM D 638) -:	3,500 psi (24 M Pa)

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



TYPICAL APPLICATIONS -:

1. REPAIRING A CRACKED ENGINE BLOCK

- a. Clean, dry and roughen the area around the crack.
- b. Thoroughly mix HY-POXY® ALUM BOND as instructed on the packaging.
- c. Spread the HY-POXY® ALUM BOND over the crack and surrounding area to a thickness of at least 1/2" (12.55mm)

For a larger gap or hole follow the same procedure but attach a wire or fibreglass screen across the gap as a backing for the HY-POXY® ALUM BOND.

**The savings by using HY-POXY® ALUM BOND for this repair are at least the cost of a new block!



2. Fill a blow hole in a casting.

- a. Clean and dry the cavity as much as possible.
- b. Thoroughly mix the HY-POXY® ALUM BOND as instructed on the packaging.
- c. Fill the blow hole to slightly above the surface of the hole.
- d. After the putty hardens, it can be filed or machined off flush with the surrounding surface.

DIRECTIONS FOR USE :

- Surfaces must be clean, dry, and preferably roughened for maximum adhesion if possible with file or sand paper. Do not touch the surface after they have been prepared.
- Squeeze & take out resin and hardener. By Volume Ratio 1:1. Or By Weight Ratio also 1 ; 1
- Mix thoroughly for 6 minutes, making certain that all of the hardener comes in contact with all of the resin.
- 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.

CURING TIME: At 75°F (24°C) a 1/2" (12.5mm) layer of HY-POXY ALUM BOND putty will be hard in approx. 45 Minutes. FULL cure times are as follows:

TEMPERATURE	WORKING TIME	FULL CURE TIME
60°F (16°C)	90 Minutes	32 Hours
75°F (24°C)	45 Minutes	16 Hours
90°F (32°C)	25 Minutes	8 Hours

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 COSMOS AUTHORISED DEALER TO GET FULL ADVANTAGE OF PRODUCT TRAINING AND KNOW HOW TO MAKE MORE USE OF HY POXY PRODUCTS



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