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**Technical Bulletin** 

**Tests Conducted** 

## **Armor Plate - Aluminum - Xtra Temp Pourable- K-053**

Descrip	otion:	Armor Plate-Aluminum Xtra	Temp Pourable is a	two-component	, aluminum filled,	epoxy system.

Ordering Information:

**Contact Copps** 

Product Advantages:

Armor Plate-Aluminum is engineered for ease of use in diverse maintenance applications including repairs of pitted aluminum propeller blades and filling voids in aluminum castings.

**Application Guidelines:** 

MAXIMUM SERVICE TEMP 450°F WORKING TIME 60 Minutes FUNCTIONAL CURE 16 Hours

MIX RATIO 8.5/1 by Volume (15.8/1 by weight)

Physical Properties:

TENSILE STRENGTH 7,000 psi ASTM D 638
COMPRESSIVE STRENGTH 18,000 psi ASTM D 695
HARDNESS, Shore D 90 ASTM D 2240
TENSILE SHEAR STRENGTH 3500 psi ASTM D 1002

Surface Preparation:

The surface to be coated must be free of all rust, scale, dirt, dust, grease, oil, release agents or other contaminants. Preheat the surface to 100 °F to drive off any moisture.

For smooth surfaces or where vibration is a concern, tack weld an open mesh screen or expanded metal approximately 1/16 to 1/8 inch above the surface. Chip off weld slag.

Mixing:

Armor Plate products are supplied in pre-measured, ready-to-use kits. Simply empty all the hardener into the resin and mix with a trowel until uniform in color (usually 1 to 2 minutes). If less than a full kit is required, accurately measure out resin and hardener onto a mixing board or flat surface before mixing with trowel. **DO NOT ATTEMPT TO "EYEBALL" THE AMOUNTS NEEDED**.

Incomplete mixing will result in poor cure and soft spots.

If the kit becomes colder than 60 °F, preheat the cans in hot tap water to a maximum of 90 °F. Excessive heat will reduce the working time. The heating of the cans with a torch is **NOT** recommended.

Application:	Apply the mixture immediately with a trowel or putty knife. Cover large holes or cracks with scree paper or fiberglass cloth and apply Armor Plate over the patch and onto an adjacent sound area.				
	paper of libergiass cloth and apply Armor Plate over the patch and onto an adjacent sound area.				

Curing For service up to operating temp

For service up to 300 °F - Allow at least 8 hours cure @ 72 °F; then preheat for at least 3 hours at peak operating temperature.

<u>For service above 300 °F</u> - Allow 8 hours cure @ 72 °F; then preheat 3-4 hours @ 350 °F or operating temperature. DO NOT EXCEED 450 °F.

Curing procedures may be shortened by applying heat with a heat gun or heat lamps. **DO NOT EXCEED** 120°F BEFORE THE PRODUCT HARDENS.

## **SAFETY PRECAUTIONS**

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymers, sanding) may cause high vapor concentrations. **DO NOT WELD ON, BURN OR TORCH ON OR NEAR, ANY EPOXY MATERIAL. HAZARDOUS VAPOR IS RELEASED WHEN AN EPOXY IS BURNED.** 

Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water for 15 minutes and obtain medical attention. Read and understand all cautions on can labels and safety data sheets before using this material.

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