

Armor Plate – Graphite- Pourable-K-045

Description: Armor Plate - Graphite compounds minimize downtime and reduce cost for the replacement of bearing materials, such as lignum vitae. Free-standing cast components are prepared easily and economically with Armor Plate – Graphite.

Ordering Information: Contact Copps

Product Advantages: Armor Plate- Graphite Pourable is used for formed-in-place bearings and seals (or portions of them). It is a tough, durable product that is field proven to provide excellent wear resistance.

Application Guidelines:
Maximum Service Temp 250°F
Working Time 30 minutes
Functional Cure 8 Hours
Mix Ratio 5/1 by Volume (6/1 by weight)

Physical Properties:	Compressive Strength	12,000 psi	<u>Tests Conducted</u>
	Hardness, Shore D	80	ASTM D 695 ASTM D 2240

Surface Preparation: Where adhesion is desired, the surface must be free of all rust, scale, dirt, grease, oil, release agents, or other contaminants. For molding or casting purposes, the surface should be coated with a release agent. Many waxes or greases are suitable for non-critical appearance uses. If the molded surface is important, a commercially available release coating should be used.

Measuring: Armor Plate kits are supplied with the resin and hardener pre-measured in the correct mixing ratio. It is best to empty the entire contents of the hardener container into the resin container to insure that the proper ratio is maintained.

If less than a full kit of Armor Plate is required for the job, both the resin and hardener **must be accurately** measured out. **DO NOT ATTEMPT TO "EYEBALL" THE AMOUNTS NEEDED.** Use a scale to weigh out each component or use measuring cups to measure by volume. Adding more or less hardener will only degrade the physical properties.

If the kit is colder than 60 °F, preheat both the resin and hardener by placing the cans in a hot water bath. The water temperature should not exceed 90 °F as higher heat will reduce the working time of the mix. Heating of the cans with a torch is **NOT** recommended.

Mixing:

Mix the components with a heavy stir stick, mixing paddle, slow speed drill, or trowel until uniform in color (about 2 minutes). Scrape the sides and bottom of the container to insure all the material is mixed. Remember, incomplete mixing will result in poor curing, loss of physical properties, and "soft spots".

NOTE: DO NOT POUR IN CROSS SECTIONS GREATER THAN 1". LARGE CASTINGS MUST BE Poured LESS THAN 1" AT A TIME TO PREVENT EXCESSIVE HEAT BUILD-UP.

Application:

The working time of Armor Plate-Graphite (the time the material can be used before it sets) will vary according to the temperature of the air, the material itself, and the surface to which it is applied.

Curing Procedures:

For reliable results the curing time should be 24 hours @ 70-80 °F. At cooler temperatures, a longer curing time should be allowed (approximately 48 hours). Curing procedures may be shortened by applying heat with a heat gun or heat lamps. **DO NOT EXCEED 120 °F.**

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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