

10600 N. Industrial Drive Mequon, WI 53092-4473 262-238-1700 (Tel.) 262-238-1701 (Fax) www.coppsindustries.com

Technical Bulletin

Armor Plate – Graphite- Trowelable-K-044

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 Trowelable 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. Non-sag paste.

Application Guidelines:

Maximum Service Temp 250°F
Working Time 40 minutes
Functional Cure 8 Hours
Mix Ratio 2.7/1 by Volume (2.2/1 by weight)

Physical Properties:

Compressive Strength Hardness, Shore D

10,000 psi 80 Tests Conducted
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.

Mix the components on a clean flat board with a trowel until the mixture becomes a uniform color (about 2 minutes). For mixing the largest kit, a mixing paddle and heavy-duty slow speed drill may be used. However, the mechanical energy put into the mix by the drill may result in a shortened working time and a lessening of the non-sag characteristics of the Armor Plate.

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 For reliable results the cu

Procedures: curing time should be allo

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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