

## **Technical Bulletin**

## Armor Plate Brushable Ceramic– K-015

Description:	Brushable Ceramic (K-015) is a smooth, two-component, ceramic filled epoxy system that provides a glossy, low friction coating designed to protect against abrasion, turbulence and cavitations.		
Ordering Information:	K-015-2 (2lb. Unit), K-015-15 (15lb. Unit)		
Product Advantages:	Repairing heat exchangers and condensers, lining chutes and tanks, resurfacing rudders and pintel housings and repairing cooling pump impellers, butterfly valves and cavitated pumps.		
Application Guidelines:	MAXIMUM SERVICE TEMP 175°F WORKING TIME 30 min FUNCTIONAL CURE 6 h MIX RATIO 3/1 by Volume (5/1 by weight) COLOR- White, Gray, Red		
Coverage:	Coverage per pound is 12 ft. <sup>2</sup> at 10 mil thickness. The working time of Brushable Ceramic (the time you have to apply the material before it sets) will vary according to the air temperature, the temperature of the material itself and the surface to which it is applied.		
Physical Properties:	Tensile Strength Compressive Strength Hardness, Shore D	4,800 psi 11,000 psi 87	Tests Conducted ASTM D 638 ASTM D 695 ASTM D 2240
Surface Preparation:	The surface to be coated must be free of all rust, scale, dirt, dust, grease, oil, release agents, or other contaminants. The more thorough the degree of surface preparation the better the applied epoxy will perform. If at all possible, it is recommended that the surface be grit blasted to a near white metal finish prior to applying the Brushable Ceramic epoxy		
Measuring:	Brushable Ceramic kits are supplied with the resin and hardener pre-measured in the correct mixing ratio. It is best to use a full kit at one time to insure the proper mixing ratio is maintained. If less than a full kit is required for the job, both the resin and hardener must be accurately measured out. DO NOT ATTEMPT TO "EYEBALL" THE AMOUNT NEEDED. Adding more or less hardener will only degrade the physical properties.		
	If the kit is colder than 60 °F (15.6 °C), preheat both the resin and hardener by placing the cans in a hot water bath. The water temperature should not exceed 90 °F (32.2 °C) as high heat will reduce the working time of the mix. Heating of the cans with a torch is NOT recommended.		

Add hardener content to the resin. Mix by hand using a large spatula or with a small, slow speed drill and mixing paddle until a uniform color is reached. Generally this takes 2-3 minutes depending on the method used. Incomplete mixing will result in poor curing, loss of physical properties, and "soft spots".

**Application:** 

Fully mixed material may be applied with a brush or roller depending on the application

## **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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