

Armor Plate High Performance Brushable Ceramic – K-096

Description:	HP Brushable Ceramic is a two component, high performance ceramic-filled coating system for sealing, protecting and repairing surfaces subject to erosion, corrosion and wear. This solvent free epoxy system has excellent chemical resistance. Available in blue and gray.		
Ordering Information:	K-096-2Lb (2lb Kit) K-096-15Lb (15lb Kit)		
Intended Use:	Seal and protect new equipment exposed to erosion and corrosion; protect pump casings, impeller blades, gate valves, water boxes, and fan blades; rebuild heat exchangers, tube sheets, and other water circulating equipment; top coat for providing exceptionally smooth surface to repaired surfaces.		
Application Guidelines:	<p>MAXIMUM SERVICE TEMPERATURE 225°F WORKING TIME 30 Minutes GEL TIME @ 77F 70 Minutes FUNCTIONAL CURE 7 Hours @ 77F MIX RATIO 6:1 by Volume (13.85:1 by Weight)</p>		
Coverage:	Coverage per pound is 9 ft. ² at 10 mil thickness. The working time of HP 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:			<u>Tests Conducted</u>
	COMPRESSIVE STRENGTH	17,700 psi	ASTM D 695
	FLEXURAL STRENGTH	9,000 psi	ASTM D 790
	TENSILE SHEAR STRENGTH, (Steel/Steel)	2,300 psi	ASTM D 1002
	HARDNESS, SHORE D	93	ASTM D 2240
Chemical Resistance:	30 day immersion:		
	<u>Excellent</u>	<u>Good</u>	<u>Not Recommended</u>
	20% Hydrochloric Acid	10% Sulfuric Acid	30% Phosphoric Acid
	50% Sodium Hydroxide	10% Nitric Acid	
	Mineral Spirits		
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 HP Brushable Ceramic.		
Measuring:	HP 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 becomes 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 material. Heating of the cans with a torch is NOT recommended.		

Mixing:

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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