

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

Technical Bulletin

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.

K-096-2Lb (2lb Kit) **Ordering** K-096-15Lb (15lb Kit) Information:

Seal and protect new equipment exposed to erosion and corrosion; protect pump casings, impeller **Intended Use:**

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.

MAXIMUM SERVICE TEMPERATURE 225°F **Application**

WORKING TIME 30 Minutes Guidelines:

GEL TIME @ 77F 70 Minutes **FUNCTIONAL CURE 7 Hours @ 77F**

MIX RATIO 6:1 by Volume (13.85:1 by Weight)

Coverage per pound is 9 ft.² at 10 mil thickness. **Coverage:**

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.

Tests Conducted Physical

COMPRESSIVE STRENGTH 17,700 psi **ASTM D 695 Properties:** 9,000 psi FLEXURAL STRENGTH **ASTM D 790 ASTM D 1002**

TENSILE SHEAR STRENGTH, (Steel/Steel) 2,300 psi HARDNESS, SHORE D 93 **ASTM D 2240**

Chemical 30 day immersion:

Excellent Not Recommended Good **Resistance:**

20% Hydrochloric Acid 10% Sulfuric Acid 30% Phosphoric Acid 50% Sodium Hydroxide 10% Nitric Acid

Mineral Spirits

The surface to be coated must be free of all rust, scale, dirt, dust, grease, oil, release agents, or other Surface **Preparation:**

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

HP Brushable Ceramic kits are supplied with the resin and hardener pre-measured in the correct mixing Measuring:

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.

FOR INDUSTRIAL USE ONLY

WARRANTY AND DISCLAIMER

Copps Industries, Inc. gives no warranty, express or implied, and all products are sold upon condition that purchasers will make their own tests to determine the quality and suitability of the product. Copps Industries, Inc. shall be in no way responsible for the proper use and service of the product. The information given in this publication is considered to be accurate and reliable and is provided as a service only. Physical properties shown are typical. Actual properties are dependent on curing conditions and degree of cure. Any information or suggestions given are without warranty of any kind and purchasers are solely responsible for any loss arising from the use of such information or suggestions. No information or suggestions given by us shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.