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Technical Bulletin

Armor Plate –CRC – K-054

Description: Armor Plate- CRC has a smooth, non-sag consistency that spreads easily, filling holes and other

imperfections in one application. Armor Plate-CRC is conveniently supplied in pre-measured, ready-to-

use kits.

Ordering Information: K-054-2(2lb), K-054-15(15lb)

Product Advantages: Armor Plate-CRC is a trowelable, corrosion resistant epoxy coating designed for thick application on badly worn areas. The unique formula of Armor Plate-CRC forms a tough high performance barrier that resists chemical attack. Armor Plate-CRC adheres easily to most metal and concrete substrates.

Application Guidelines:

MAXIMUM SERVICE TEMP 200°F **WORKING TIME 15 minutes FUNCTIONAL CURE 5-7 Hours**

MIX RATIO 2/1 by Volume (2/1 by weight)

Coverage:

Coverage per pound is 30 in2 (193cm2) at 0.5 in (1.27cm) thickness. The working time of Armor Plate -CRC (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:

Tests Conducted COMPRESSIVE STRENGTH 14,500 psi **ASTM D 695** HARDNESS. Shore D 85 **ASTM D 2240** HIGH VELOCITY PARTICLE 3.0

WEAR RESISTANCE (weight loss) %

Chemical Resistance: Armor Plate-CRC resists these chemicals:

AMMONIUM HYDROXIDE SODIUM HYDROXIDE **HYDROCHLORIC ACID < 10 %** SULFURIC ACID < 70 %

MINERAL SPIRITS **WATER**

NITRIC ACID < 10 %

Surface Preparation: The surface to be coated must be free of all rust, scale, dirt, dust, grease, oil, release agents, or other contaminants. Preheat the surface to 100°F to drive off any moisture. For smooth surfaces or where vibration is a concern, tack weld an open mesh screen or expanded metal approximately 1/16 to 1/8 inch above the surface. Chip off weld slag.

Measuring:

Partial kit usage is not recommended. If you need less than the amount of Armor Plate-CRC in the smallest kit, accurately weigh or measure by volume the resin and hardener following the mixing ratios shown under Application Guidelines. Do not attempt to "eyeball" the mixture needed.

Mixing:

Empty all the hardener into the resin and thoroughly mix with a trowel or heavy-duty, slow-speed drill and mixing paddle until uniform in color, usually 2 to 5 minutes. Remember, incomplete mixing will result in incomplete curing, soft spots, and poor performance.

If the kit becomes colder than 60 °F, preheat the cans in hot tap water to a maximum of 90 °F. Excessive heat will reduce the work life. **Do not heat cans with torch.**

Application:

Apply a thin, wet coat to create tack. Repeat applications, building the tack coat to the desired thickness. If a screen or expanded metal is used for reinforcement, push a thick layer through the screen at one end. Spread the Armor Plate-CRC to the other end, making sure the surface below is covered.

Curing Procedures:

Cure for a minimum of 5-7 hours at 77 °F/ 25 °C before using the equipment or subjecting Armor Plate-CRC to media.

The curing time varies with the temperature of the air and surface being bonded. Hard cure will take 16 to 36 hours.

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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