PRODUCT DATA SHEET: CERAM-KOTE 54® SF

Description: CeRam-Kote 54® SF is 100% solids ceramic polymer coating engineered to provide excellent abrasion and corrosion protection in various environments for all metals, fiberglass reinforced plastics, concrete and plastic substrates. Color of product is gray.

TECHNICAL DATA

Volume Solids: 100% (calculated value)

VOC: 0 g (calculated value)

Gloss: Semi-gloss

Number of Coats: One or two coats depending on environment. Minimum coating thickness should be 15 mils (375 microns). Maximum coating thickness per layer should be 25 mils (625 microns).

Dry Film Thickness: Minimum = 15 mils (375 microns)
Maximum = 25 mils (625 microns)

Cure Time: Minimum DFT (15 mils / 375 microns) air dries to a touch-dry finish within three (3) hours at 72°F (22.2°C) and dries to a 70% cure in twelve (12) hours. Cure times lengthen at lower temperatures and shorten at higher temperatures. If the coating is to be exposed to a critical service environment, coating should be fully cured before placing into service.

Surface Preparation: Bonding strength depends on proper preparation of the surface to be protected for long-term performance of the product. The substrate should be free of oil, grease and salt/chloride contamination. Specifications call for a white metal (NACE 1, SSPC-SP5, Swedish Standards SA-3) finish with a 2-3 mil (50-75 microns) anchor profile. Surface preparation should be no less than a near white (NACE 2, SSPC-SP10, Swedish Standards SA 2½) finish. Cleanliness is the most important step to produce a coated surface that will perform and last. Call Ceram-Kote for surface preparation recommendations of materials such as aluminum, brass, plastic, fiberglass and/or concrete.

Mixing Ratio: 1:1 by weight
1:1 by volume

Mixing: CeRam-Kote 54® SF contains a high loading of ceramic particles which must be placed into full suspension with the resin prior to application. CeRam-Kote 54 SF is packaged in two cans, Part A (resin and ceramics) and Part B (curing agent). Mix Part A with a paddle mixer until all ceramic powders are suspended in the resin (4 to 5 minutes). Time required to place ceramics into suspension varies according to temperature and length of material storage time. **Regardless of time needed, shake all ceramic material into suspension prior to proceeding.** Failure to properly mix will keep CeRam-Kote 54® SF from performing or curing properly. Check the can to assure all solids are in suspension prior to proceeding to the mixing step.

Combine Part A (coating) and Part B (curing agent) and **mix** until both parts are thoroughly mixed Stirring time is temperature dependent, but a two (2) to four (4) minute stir at 72°F (22.2°C) should thoroughly mix the components. **However, caution must be used to prevent heat buildup.** No induction time is needed before application.

Pot Life & Shelf Life: Pot life for CeRam-Kote 54® SF at 72°F (22.2°C) is approximately thirty minutes (30) minutes due to the product being 100% solids (no solvent). Colder temperatures will increase the pot life and warmer temperatures will decrease the pot life. Keep cans out of direct sunlight to prevent heat buildup. Preferred storage is a dry enclosed area under 85°F (29°C). Shelf life is two (2) years.

Thinning: It is not recommended to add any solvent / thinner to product. If totally necessary, adjust viscosity with small amounts of MEK or Xylene. Use caution when adjusting the viscosity. A little goes a long way. Thinning dilutes the high solids of CeRam-Kote 54® SF, creates excessive overspray and can cause some color changes in bright colors.

Application: Airless spray pump of 68:1 or greater is recommended.

Tip size:	0.019 to 0.029"
Hose length (max):	70-feet (21 meters)
Hose diameter (max):	¾" (19 mm)
Material spray temp:	Minimum 68°F (20°C).

Climate: Use CeRam-Kote 54® SF only if the substrate temperature and ambient air temperature is above 50°F (10°C). No coating should be permitted when substrate is wet from rain or dew. Moisture will inhibit the catalyst reaction and CeRam-Kote 54® will not cure or perform properly.

Holiday Detection: CeRam-Kote 54® SF is classified as a thin-film coating and should be tested for defects and holidays using a 67½ volt, wet sponge spark detector set at 80,000 ohms resistance, such as a Tinker and Rasor model M-1.

Repairs: If application of the coating is less than seventy-two (72) hours old and has not been exposed to contamination, repair by wiping with Acetone, MEK or Isopropanol (99% pure) and then re-apply CeRam-Kote 54® SF. If contaminated or more than 72 hours old, first sand with appropriate grit sandpaper, then repeat repair process.

Cleanup: Purge and clean spray equipment within thirty (30) minutes of the final spray. Flush equipment with Acetone, MEK or Isopropanol (99% pure) until solvent sprays clear. Disassemble and clean equipment to manufacturer's recommendations. Material left in spray equipment will solidify and damage equipment. Use precautionary measure applicable to any catalyzed material.

Safety: See individual product label for safety and health data. A Material Safety Data Sheet is available upon request.

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