



## PRODUCT DATA SHEET: CERAM-KOTE 2000®

**Description:** CeRam-Kote 2000® is a ceramic polymer coating system engineered to provide excellent **chemical immersion service** protection to all metals, fiberglass reinforced plastics, concrete and plastic substrates. CeRam-Kote 2000® is available in three colors: white, grey and tan. The CeRam-Kote 2000® formula has an ABS Certificate of Design Assessment.

<b>Suggested Uses:</b>	Internals in Tanks	Hydrocarbon Service
	Harsh Chemical Environments	Blow Out Preventers
	Secondary Containment	Petrochemical Environments
	Clarifiers	Wastewater Treatment Clarifiers
	Non-UV Areas	Wastewater Treatment Pumps
	Internals in Vessels and Piping	Wastewater Treatment Lift Stations
	Internals in Valves	Brine Tanks
	Fuel Tanks	Non-potable water tanks

## TECHNICAL DATA

**Volume Solids:** 83% +/- 2% (calculated value)

**Weight Solids:** 93% +/- 2% (calculated value)

**VOC:** 0.74 lb/gal (89 g/l)

**Number of Coats:** One coat, two passes, with each pass 6-8 mils (150-200 microns) WFT

**Dry Film Thickness:** CeRam-Kote 2000® should be applied holiday free at a minimum of 10 mils (250 microns) DFT with a maximum thickness of 15 mils (375 microns) DFT.

**Cure Time:** A two-pass film of 8-10 mils DFT (200-250 microns) air dries to a dry touch finish within five (5) hours at 72°F (22.2°C) and dries to a 70% cure in fourteen (14) hours. Cure times lengthen at lower temperatures and shorten at higher temperatures. The 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 2.0-2.5 mil (50 - 62.5 microns) anchor profile. Surface preparation should be no less than a near white metal (NACE 2, SSPC-SP10, Swedish Standards SA 2 ½) finish. Cleanliness is the most important step to produce a coated surface that will perform and last. Call CERAM-KOTE® COATINGS INCORPORATED for surface preparation recommendations of materials such as aluminum, brass, plastic, fiberglass and/or concrete.

**Mixing Ratio:** Four (4) parts of Part A to one (1) part of Part B by volume.  
Seven (7) parts of Part A to one (1) part of Part B ratio by weight.

**Mixing:** CeRam-Kote 2000® contains a high loading of ceramic particles which must be placed into full suspension with the resin prior to application. CeRam-Kote 2000® is packaged in two cans, Part A (base) and Part B (curing agent). Shake Part A (base) with a Cyclone air-powered shaker or mix Part A with a paddle mixer until all ceramic powders are suspended in the resin. Time required to place ceramics into suspension varies according to temperature and length of material storage time. At 72°F (22.2°C), generally a four (4) to six (6) minute shake will place the ceramic powders into suspension. **Regardless of time needed, shake all ceramic material into suspension prior to proceeding.** Failure to properly mix will keep CeRam-Kote 2000® 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 (base) and Part B (curing agent) and *stir* again until both parts are thoroughly mixed.

<b>Pot Life &amp; Shelf Life:</b>	Pot life for CeRam-Kote 2000® at 72°F (22.2°C) is approximately one (1) hour. 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/usage is a dry enclosed area under 85°F (29°C) /used within two (2) years.				
<b>Thinning:</b>	Adjust viscosity with small amounts of MEK, Acetone, Toluene or Xylene. Maximum recommendation of 15%.				
<b>Application:</b>	<p>Recommended application equipment (equivalent equipment may be substituted):</p> <table border="0"> <tr> <td style="vertical-align: top;"> <u>Airless Spray:</u>            Pressure = 2,800 – 3,000 psi            Hose = 3/8" ID            Tip = 0.021" to 0.027"            Filter = 30 mesh            Reduction = as needed up to 10% by volume         </td> <td style="vertical-align: top; padding-left: 20px;"> <u>Conventional Spray:</u>            Gun = Binks 2001 or similar            Fluid Nozzle = 68 (2.8 mm orifice size)            Air Nozzle = 68PB            Atomization Pressure = 40 psi            Fluid Pressure = 30 psi            Reduction = as needed up to 15% by volume         </td> </tr> <tr> <td style="vertical-align: top; padding-top: 10px;"> <u>Brush:</u>            Natural bristle            Reduction = Not recommended         </td> <td style="vertical-align: top; padding-top: 10px; padding-left: 20px;"> <u>Roller:</u>            Cover = 1/2" lambs wool            Reduction = Not recommended         </td> </tr> </table> <p>Damp or oil contaminated surfaces should always be brushed, rolled or spray and backroll applied, working the paint film into contamination.</p>	<u>Airless Spray:</u> Pressure = 2,800 – 3,000 psi Hose = 3/8" ID Tip = 0.021" to 0.027" Filter = 30 mesh Reduction = as needed up to 10% by volume	<u>Conventional Spray:</u> Gun = Binks 2001 or similar Fluid Nozzle = 68 (2.8 mm orifice size) Air Nozzle = 68PB Atomization Pressure = 40 psi Fluid Pressure = 30 psi Reduction = as needed up to 15% by volume	<u>Brush:</u> Natural bristle Reduction = Not recommended	<u>Roller:</u> Cover = 1/2" lambs wool Reduction = Not recommended
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<b>Climate:</b>	Use CeRam-Kote 2000® only if the substrate temperature and ambient air temperature is above 40°F (4.4°C). No coating should be permitted when substrate is wet from rain or dew, when surfaces are less than 5°F (3°C) above the dew point and holding or when relative humidity is greater than 85%. Moisture will inhibit the catalyst reaction and CeRam-Kote 2000® will not cure or perform properly.				
<b>Holiday Detection:</b>	CeRam-Kote 2000® 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 Razor model M-1.				
<b>Repairs:</b>	If application of the coating is less than seventy-two (72) hours old and has not been exposed to contamination, repair by wiping with CeRam-Kote® Thinner 1 or CeRam-Kote® Thinner 3 and then re-apply CeRam-Kote 2000®. If contaminated or more than 72 hours old, first sand with appropriate grit sandpaper, then repeat repair process.				
<b>Cleanup:</b>	Purge and clean spray equipment within thirty (30) minutes of the final spray. Flush equipment with CeRam-Kote® Thinner 1 or CeRam-Kote® Thinner 3 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.				
<b>Safety:</b>	See individual product label for safety and health data. A Material Safety Data Sheet is available upon request.				

4/6/17