


# SMT Manufacturing– TECHNICAL DATA SHEET

**TDS-629B**

## Pro+SeramKote Non-ferrous Metal & Paint Treatment (PT-629A)

TYPE	DRY FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP	DRY TIME		
					TACK	USE	CURED
Ceramic Polymer Treatment (siloxane)	10 – 12 Microns on average	Spray, Short Nap Roller, or Brush	DO NOT THIN	Pro+Wipe PT-020 Equip. Cleaner	2-4 Hours 70°F, 50% RH	8-12 Hours (on average)	5 to 7 Days (full cure)
PRODUCT DESCRIPTION:	<p>Pro+SeramKote PT-629 is an alcohol-dispersed Ceramic Polymer Treatment (CPT) that acts as a wash primer to protect non-ferrous metals exposed to corrosive industrial and marine environments. Its clear polysiloxane film seals non-ferrous metals including aluminum, copper alloys, and austenitic corrosion resistant steels (CRES) providing long-term protection against corrosion, chemical attack and mildew growth. Pro+SeramKote PT-629 chemically bonds to clean metal surfaces which inhibits underfilm and filiform corrosion. PT-629 also bonds with and seals cured paint, plastics, and fiberglass. The inorganic structure of the film is unaffected by UV radiation and can resist temperatures up to 1500°F. PT-629 also The smooth, tough, inorganic and positive-potential nature of a Pro+SeramKote-treated surface resists attachment and growth of mold, algae, fungus, and some bacteria. This creates a hydrophobic, hygienic, and easy-clean surface.</p>						
WHERE TO USE:	<ul style="list-style-type: none"> <li>• Heat exchanger coils, cabinets, and supply ducts</li> <li>• CRES eductors, fittings, piping, and trim</li> <li>• Copper-based alloy fittings, valves, and trim</li> <li>• Decorative and structural aluminum</li> <li>• Other applications upon approval (contact SMTM or your local Distributor)</li> </ul>						
PRECAUTIONS FOR METAL SURFACES:	<p>Apply Pro+SeramKote PT-629 over non-ferrous metals/CRES that have been cleaned to remove grease, contaminants, and loose corrosion product. For highly contaminated or oxidized metals, remove loosely adhering oxide and contamination by hydro-blasting, mechanical or hand tool cleaning, or light abrasive blasting before applying PT-629. Do not exceed a 2 mil profile. For added protection of dissimilar metal joints, brazed joints, and for any steel or galvanized parts, prime with Pro+Tec-WB Anti-Corrosion Treatment PT-120.</p>						
SURFACE PREPARATION:	<p>The surface to be coated must be clean, dry and free from dirt, oily residue, grime, loose oxidation, or any other surface contaminants that could retard chemical bonding. Surface temperature must be between 50-80°F and ambient temperature must exceed the dew point during application and curing. Clean the surface by liberally applying Pro+Kleen Concentrated Degreaser PT-001. Pro+Kleen PT-001 is a concentrate which must be diluted with water before use. Dilute Pro+Kleen PT-001 by adding 1 part cleaner to 10 parts water, preferably hot water, for degreasing. Using a pump up garden type sprayer, flood the surface with diluted PT-001 cleaner. Allow the cleaner to “work” for 3 to 5 minutes, scrubbing with nylon brushes for heavy dirt. Do not allow cleaner to dry. Thoroughly rinse with clean tap water. Repeat, until all soap is removed. CAUTION: Pressure washers can damage HVAC coils. Pro+Kleen PT-001 Cleaner may be used with a high-pressure power washer with soap injection, for example, when cleaning large surface areas. CAUTION: Local regulations may require collection of rinsate. Rinse thoroughly with clean water until all soap bubbles are gone. Neutralize surfaces with Pro+Rinse PT-070 when specified. Allow the surface to dry completely before applying Pro+SeramKote PT-629. Forced air blowing or turning on HVAC fans may be employed to speed drying.</p>						

<p>MIXING &amp; CATALYZING:</p> <p>WARNING: Alcohol vapors are flammable. No smoking or hot work within 50 feet.</p> <p>WARNING: Methanol vapors are hazardous. Assure sufficient ventilation and wear PPE (respirator, eye protection, gloves). See MSDS.</p> <p>CAUTION: In the event of conflicting instructions, follow instructions on the label. Please inform SMTM of the discrepancy.</p>	<p>Pro+SeramKote PT- 629A is a three-component material and must be properly mixed for curing to occur. This product is packaged, in kit form, with separate containers for the A, B &amp; C components. To mix quart and smaller kits:</p> <ol style="list-style-type: none"> <li>1. Pour Part B into the carafe bottle labeled Part A.</li> <li>2. Notice a moderate exothermic heat reaction during blending. This is normal. For mixing in the bottle, use a magnetic pill mixer with the cap off or gently swirl (not shake) the carafe bottle with the cap on for 15 minutes. Periodically remove the cap to release reaction vapors (alcohol).</li> <li>3. Next, add the C component liquid into the admixture of the A &amp; B components. Blend for 15 additional minutes .</li> <li>4. Cap the bottle and set aside for 15 minutes to properly induct (sweat in).</li> </ol> <p>To mix gallon and larger kits:</p> <ol style="list-style-type: none"> <li>1. Pour Part B into the container labeled Part A. Alternatively, pour the A component liquid into a clean, white HDPE plastic bucket, only. Then, pour the B component liquid into the A component. Gently swirl the container or stir contents of the HPDE bucket for 5 seconds.</li> <li>2. Allow mixture to catalyze. Catalyzation is an exothermic reaction. Mixture temperature will rise to a peak between 110° to 130°F. Use a temperature probe taped to the side of the container or a laser infrared thermometer to monitor mixture temperature.</li> <li>3. When the temperature falls below 100°F (45 to 75 minutes from peak temperature), add Part C and swirl lightly again for 5 seconds.</li> <li>4. . Allow the completed mixture to rest for 15 minutes. Lightly swirl again before use.</li> </ol> <p>Pot life of mixed material is 4 to 8 hours timed from the end of the 15-minute induction period. Keep container closed when not in use.</p>
<p>APPLICATION:</p> <p>WARNING: Alcohol vapors are flammable. No smoking or hot work within 50 feet.</p> <p>WARNING: Methanol vapors are hazardous. Assure sufficient ventilation and wear PPE (respirator, eye protection, gloves). See MSDS.</p>	<p>Pro+SeramKote PT-629 can be applied by conventional spray, short nap roller, or brush techniques. The size and configuration of the surfaces to be treated will dictate the best method. Apply at a rate not to exceed 1 mil (25 microns) wet film thickness. Mask, drape or protect any adjacent areas not to be coated. Control the immediate application area to prevent overspray.</p> <p><b>Conventional.</b> Use an air compressor that can deliver a minimum of 3 CFM @ 90 PSI. Use a dual regulated pressure pot with a good automotive type production gun (Binks, Kremlin, Devilbiss). Set the fluid (pot) pressure gauge at 10 to 12 PSI and the air pressure gauge at 8 to 10 PSI. Close down the fluid needle adjustment screw, on the back of the gun, to its tightest 'lock down' position. Then, turn the adjustment screw ½ turn counter clockwise to open up controlled material flow. Check the spray pattern and make minor adjustments to air pressure or needle settings.</p> <p><b>Roller.</b> Use a short nap adhesive or mohair roller cover with a solvent resistant core. Pick up a small amount of material into the cover and gently apply using a series of one directional roller strokes. Avoid over rolling the material and avoid working back into partially set material. Maintain a functional working wet line during application and roll to natural breaks. Always mask, and protect surfaces not to be coated.</p> <p><b>Brush</b> – Small surface areas or cut in edges can be blended in using a natural hair bristle brush or disposable foam applicator provided the initial application is still freshly wet. This may only be within several minutes in outdoor applications. This coating CANNOT be overcoated until fully cured. Overcoating and lay-on/lay-off application is NOT recommended.</p>
<p>CURING INFORMATION:</p>	<p>Pro+SeramKote PT-629 cures by cross-linking mechanisms and may take up to 7 days for complete curing to occur. Whereas these treatments dry to touch in 1 to 2 hours and are serviceable after overnight dry, the full 7 day cure cycle must be allowed before submitting these treatments to all cleaning, chemical or solvent exposures or immersion in water. After 7 days cure time, these treatments may be readily cleaned using SMTM-recommended cleaners.</p> <p><i>Do Not Apply if rain, fog or dew is imminent within 12 hours of product application.</i></p> <p><i>Do Not Mix or Apply if the temperature will drop below 50°F at any time during application or within 12 hours of product application.</i></p>
<p>CLEAN UP:</p>	<p>Application tools and spray equipment should be cleaned using Pro+Wipe Solvent &amp; Tool Cleaner PT-020 or denatured alcohol. Flush the pump, hose, pressure pot and gun thoroughly until all product has been cleaned from the spray system. Remove the tip and nozzle and clean thoroughly before replacing onto the gun.</p> <p>Clean up drips, spills or over spray by saturating a cotton cloth with Pro+Wipe Solvent &amp; Tool Cleaner PT-020 or denatured alcohol. Wipe up drips, spills or over spray before the product dries to touch. Always dispose of alcohol-saturated cloths in a safe and proper manner.</p>
<p>PRODUCT YIELD:</p>	<p>The yield of product varies with substrate condition and application method. The yield can be as high as 1,200 ft<sup>2</sup> or as low as 600 ft<sup>2</sup> per gallon. Actual field conditions will dictate product yield.</p>

SAFETY:	Always wear safety goggles, latex gloves, and protective clothing when working with SMTM CPTs and cleaning products. Ensure adequate ventilation. When needed, use a carbon-filtered respirator (NIOSH/MSHA Black Cartridge) for added respiratory protection. Prohibit open flames or hot work within 50 feet of mixing or application. Always read specific label cautions and MSDS before working with these products. Always have MSDS on file and available at the job site.
FIRST AID:	<p><b>Eye contact:</b> Immediately flush with clean water for 15 minutes. Get medical attention.</p> <p><b>Skin contact:</b> Washing at mealtime and end of shift should be sufficient.</p> <p><b>Inhalation:</b> Remove to fresh air. Get medical attention, if ill effects persist.</p> <p><b>Oral:</b> Get medical attention, immediately. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light sources. Treat the same as methyl alcohol poisoning</p>
CLEAN UP/CONTAINMENT:	Review FIRE FIGHTING MEASURES and HANDLING sections of MSDS before proceeding with clean-up. Use suitable protective wear and respiratory protection, such as full face respirator. Remove possible ignition sources. Prevent material from entering sewers, waterways, low areas, or floor drains. Soak up with sawdust, sand, oil dry, or other absorbent material. Sweep up or use a non-sparking shovel for clean-up. Place in appropriate container for disposal. Flush contaminated surface with water and remove flush to an approved permitted treatment system or collect flush for disposal. Dried and cured residue is non-hazardous.
CAUTION:	Avoid spraying in windy conditions as the film can cure too fast and overspray can occur.
Contact Information	<p>SMT Manufacturing, 4855 Distribution Ct. #10, Orlando FL 32822  Phone: 386-447-0900 FAX: 386-447-0910  Web Sites: <a href="mailto:info@surfacemod.com">info@surfacemod.com</a> or <a href="http://www.surfacemod.com">www.surfacemod.com</a></p>
Note 	<p>The information herein is general information designed to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to contents and suitability for their specific applications. We warrant that our products will meet our written specifications. Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness for a particular purpose, nor is any protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is limited to replacement of our materials and in no event shall we be liable for special, incidental or consequential damages. This revision supersedes previous documentation.</p> <p>Revised 12/17/2007</p>