WATER BASED CHEMICAL RESISTANT PAINTS

GENERAL DESCRIPTION

Pruett-Schaffer’s 27-Series products are water-based coatings designed as spray-applied, corrosion preventative primers or topcoats for severe service. They are carboxylated polyvinylidene chloride based emulsions. This material creates dense, tough coatings with excellent chemical and solvent resistance and very low water vapor and oxygen transmission rates, even in thin films. They contain very little volatile organic content. They combine the ease of use of an air drying water based paint having low odor and toxicity with the performance of a two component solvent based system.

This series is also available in flame resistant primer and topcoat formulations. The coatings’ flame retardant properties result from flame or heat induced release of water and fire extinguishing chlorine compounds from the vinylidene chloride polymer, which limits the spread of the flame and results in much less smoke development than other coatings.

RECOMMENDATIONS

27-Series are available in universal primers suitable for topcoating with alkyds, vinyls, epoxies, urethanes, or water based materials. They are also available in low to high gloss topcoats for a wide variety of applications including burial, marine, and other severe service. The coatings have low minimum film forming temperatures, allowing use in a wide range of shop or field conditions.

SURFACE PREPARATION

The performance of these products will be in direct proportion to the quality of surface preparation. Remove easy accumulations of grease and oil, if present, with the appropriate solvents or detergents. Spot rust must be removed from steel surfaces by sandblasting to SSPC-SP-6 for best results, or by steel brush when blasting is not practical. Weathered galvanized steel must be power washed to remove water soluble zinc corrosion products before using these coatings.

THINNING

Under normal conditions no thinning is necessary. If desired, thin with water, do not use organic solvents. Add a little at a time with constant gentle agitation to a maximum of 5% by volume.

APPLICATION EQUIPMENT

Apply with conventional spray equipment. Use .017 to .021 spray tip size and a 30:1 pump ratio with 3 gallon per minute output. Maintain dry film build per coat between 3 and 5 mils. Spray equipment should be stainless steel to prevent corrosion of parts.

DRYING TIMES & TEMPERATURES

Dries to recoat in 1 to 1.5 hours at 77 °F and 50% relative humidity. High humidity will prolong dry time more so than low temperatures. Good air movement over the work area or local exhaust is recommended. Heat lamps are not recommended; they may cause surface curing and trap solvent within the film, which causes water sensitivity problems. Allow to cure for 7-10 days at 77 °F before beginning severe service.

CLEANUP

Cleans up easily with soap and water before paint dries hard.

ENVIRONMENTAL

These products meet current air pollution regulations regarding hydrocarbon and ozone reactive emissions. They are VOC compliant for architectural maintenance and industry, contain no chromate, and comply with current federal regulations regarding the use of lead in paint.

PHYSICAL PARAMETERS

VOC, ASTM D-3960: 0.15 - 0.31 Lb./gal mixed system typical

WEIGHT PER GALLON, ASTM D-1475: 9.4-12.1 lbs.

NONVOLATILE:
By weight: 53-67%  
By volume: 52-48%

THEORETICAL COVERAGE:
770-830 ft²/gallon/mil, dry film

INITIAL GLOSS, 60°, ASTM D-523: Varies

VIS COSITY:
75-85 Krebs Units

FLASH POINT: Greater than 141 °F

IMPACT, ASTM D-2794:
Direct > 40, Reverse > 40

THIS INFORMATION RESULTS FROM TESTS CONDUCTED IN A LABORATORY UNDER LABORATORY CONDITIONS. DIFFERENT RESULTS MAY BE OBTAINED IN COMMERCIAL USE OF THIS PRODUCT UNDER FACTORY OR FIELD CONDITIONS. PRUETT-SCHAFFER MAKES NO WARRANTY CONCERNING THE SUITABILITY OF THIS PRODUCT FOR THE END USE CONTEMPLATED BY THE BUYER, EXCEPT THAT THE PRODUCT SHALL BE IN COMPLIANCE WITH THE TECHNICAL SPECIFICATIONS PRESENTED HEREIN.

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