Diamond Vogel | INDUSTRIAL COATINGS

TECHNICAL DATA SHEET

Product Description: Waterborne Acrylic Primer System

PRODUCT CODES: Gray – QC-0621 | White – QC-1622 | Red Oxide – QC-5623 | Black – QC-9624

DESCRIPTION: Waterborne Acrylic Primer Systems are specifically developed for original equipment manufacturers that desire water based coatings with excellent corrosion resistance, flexibility, and adhesion. Acrylic primers provide the foundation for a superior coating system. Colors that are currently available include white, gray, red, and black.

PHYSICAL PROPERTIES:

Weight Solids:	47% to 49%
Volume Solids:	32% to 34%
Resin Type:	Acrylic Emulsion
Gloss:	Satin
Theoretical Coverage:	520 to 550 square feet at 1.0 mil
Weight per Gallon:	10.2 to 10.9 pounds
Viscosity:	75 to 80 KU at 77º F
EPA VOC:	1.3 pounds per gallon
Actual VOC:	0.5 pounds per gallon

SURFACE PREPARATION: The service expectancy of a coating is primarily dependent upon good surface preparation. The surface to be coated should be free of mill scale, rust, oil, and other contaminates, including salt deposits. This may be applied over steel, galvanizing, aluminum, or fiberglass.

Steel: Bare steel areas should be treated with iron phosphate conversion coatings and adequate rinsing.

Aluminum: Aluminum should be treated with appropriate metal cleaners and conditioners. For optimum adhesion, hot rolled steel should have the mill scale removed by an abrasive blast to SSPC-SP-6 to an average profile of 1.5 mils and then coated before flash rusting occurs.

REDUCTION: Waterborne Acrylic Primers will atomize easily, and may be sprayed without reducing the viscosity. If reduction is necessary, thin sparingly with water. Do not exceed a 10% reduction by volume.

APPLICATION:

Airless: Airless tip sizes should be in the .013 to .017 range.

Electrostatic Spray: Acrylic primers can be sprayed with all types of application equipment. Proper safeguards must be in place to spray with electrostatic equipment.

In-Line Heat: Surface temperatures musts be above 50°F and relative humidity should be below 85%. Coating must be cured before exposing to moisture or freezing temperatures

Dry Film Thickness: For best results, dry film thicknesses should be approximately 1.5 mils above profile. This will require wet film thicknesses in the range of 3.0 to 5.0 mils. Sag resistance will be about 6.0 to 8.0 mils wet.

DRY TIMES: Dry times are directly related to water evaporation, and these characteristics are dependent upon humidity and air circulation. Fans and air movement will aid drying. Force drying can be done at 140°F to 180°F for 10 to 20 minutes. Although initial drying is fairly fast, full hardness may not be achieved for 3 to 4 hours, depending on conditions. Normally, acrylic primers can be topcoated after approximately 30 minutes and surface must be tack free.

CLEAN UP: Flush lines with water. If the coating has dried, use ketones to clean up.

Waterborne Acrylic Primer System

PERFORMANCE: Typical, tested on B-1000 panels at 1.5 mils DFT
Salt Spray: ASTM B-117 – 240 hours – less than 1 mm creep
Adhesion: ASTM D-3359 – 5B or no loss

SAFETY PRECAUTIONS: Refer to SDS for specific information. All information subject to change without notice.

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