VpCI®-396



PRODUCT DESCRIPTION

VpCI-396 is a high solids aromatic moisture cure urethane. VpCI-396 is a direct to metal primer for multimetal protection. VpCI-396 should be top coated with an aliphatic urethane top coat for best results. In addition to the outstanding barrier protection, VpCI-396 also contains contact corrosion inhibitors for additional protection. VpCI-396 is suitable for immersed structures when applied over VpCI® CorrVerter® for marginally prepared surfaces; such as ballast tanks, storage tanks, or holding tanks containing hydrocarbons to high salinity solutions.

VpCl-396 forms a very hard, but flexible coating that cures in the presence of moisture in the air. For best results the curing conditions required are a relative humidity between 20% and 80% with temperatures above 32°F (0°C) and below 120°F (50°C).

FEATURES

- Single component package
- Can be coated at a relative humidity up to 80%
- Can be applied at low temperatures
- Excellent adhesion
- High solids

METALS PROTECTED

- Aluminum**
- Cast iron
- Galvanized steel**
- Steel
- ** A wash primer such as VpCl®-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCl-396 to these substrates.

TYPICAL APPLICATIONS

- Bridges
- OEM
- Structural steel
- Storage tanks
- Ballast tanks or ships

TYPICAL PROPERTIES

Appearance Viscous aluminum liquid
Dry to recoat time Minimum 4 hr. @ 77°F (25°C),

55% relative humidity

Maximum time to Recoat 2 weeks after initial application (solvent wipe may be required)

Dry to touch time 1 hr. @ 77°F (25°C), 55% relative humidity

Fully Cured 7 days @ 77°F (25°C), 55% RH

Film type Hard
Flash point 78°F (25°C)
Non-volatile content 63-72% by weight

(60-62% by volume) Shelf life 1 year

Theoretical spread rate 328-481 ft²/gal @ 2-3 mil DFT

(7.9-11.6 m²/l @ 50-75 microns

DFT)

 Viscosity
 500-1100 cps at 6 rpm

 VOC (regulatory)
 3.1-3.2 lb/gal (372-384 g/l)

 VOC (actual)
 3.1-3.2 lb/gal (372-384 g/l)

 Density
 9.2-9.6 lb/gal (1.10-1.15 kg/l)

Coefficient of Friction 0.20 Adhesion 5B Film Hardness 4H-7H

Temperature Resistance -150°F to 300°F (Fully Cured) -150°C to 150°C)



SURFACE PREPARATION

NACE #2, ARS High A-3, SSPC SP6 or 10. Surface must be dry prior to application of product (no moisture).

APPLICATION

Product Preparation:

Stir VpCI-396 prior to usage. (Do not use a high shear blade).

Methods for Monitoring Application: Wet film thickness gauge.

Product Application:

Normal wet film thickness of 3-5 mils (75-125 microns) yields 2-3 mils (50-75 microns) dry film thickness. It is recommended under high humidity conditions (60-80%) that the maximum wet film thickness should be reduced to approximately 2-2.5 mils (50-62 microns), and application of two coats may be necessary.

Do not exceed 3 dry mils (75 microns).

Recommended use of Airless Spray:

ManufacturerGun ModelTip/Aircap CombinationGraco205-591BulldogBinks500Mercury 5CDeVibissJGN-501QFA-519

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT SAFETY DATA SHEET FOR MORE
INFORMATION

Hose should be 3/8" (0.95 cm) I.D. minimum, but a 1/4" (0.6 cm) I.D. whip end section may be used for ease of application. A maximum length of 100 feet (30.5 m) is suggested. Best results will be obtained using a 0.013"-0.017" (0.03 cm - 0.04 cm) tip at 1200-1700 psi (83-117 bar).

NOTE: Nylon or Teflon type packings are available from pump manufacturer and are highly recommended.

NOTE: Similar equipment may be suitable.

Product Cleanup:

Low flash point solvent (xylene, toluene, aromatic 100)

TEST DATA [AT 2 MILS (50 MICRONS)] DFT*

Test Method	SAE 1010 Carbon Steel
Salt Spray (ASTM B 117)	900-1000 hours
Humidity (ASTM D 1748)	1000+ hours

^{*}Dry Film Thickness

PACKAGING AND STORAGE

VpCl-396 is available in 5 gallon (19 liter) metal pails. One gallon pails available upon request.

Important: A partially used container must be purged with nitrogen to prevent a reaction in the can if it is not used within one day!

LIMITATIONS

Apply VpCI-396 only at relative humidity of between 20% and 80%. Air temperature should be between 32°F and 100°F (0°C and 38°C).

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