



HIGH PERFORMANCE VpCI™ COATINGS

VpCI®-396



PRODUCT DESCRIPTION

VpCI-396 is a high solids aromatic moisture cure urethane for use on marginally prepared structural steel. 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 Vapor phase 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.

VpCI-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 VpCI®-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCI-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	358-537 ft ² /gal @ 2-3 mil DFT (8.9-13.4 m ² /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 (Fully Cured)	-150°F to 300°F (-78°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 3-4 mils (75-100 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:

Manufacturer	Gun Model	Tip/Aircap Combination
Graco	205-591	Bulldog
Binks	500	Mercury 5C
DeVibiss	JGN-501	QFA-519

FOR INDUSTRIAL USE ONLY

KEEP OUT OF REACH OF CHILDREN

KEEP CONTAINER TIGHTLY CLOSED

NOT FOR INTERNAL CONSUMPTION

CONSULT MATERIAL 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

VpCI-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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