



HIGH PERFORMANCE VpCI® COATINGS

VpCI®-386 HT Aluminum



PRODUCT DESCRIPTION

VpCI-386 HT Aluminum is a unique, high heat resistant water-based primer/topcoat that successfully provides protection in harsh outdoor unsheltered applications. The complex mixture of non-toxic, organic inhibitors, and an aluminum pigment offers protection that can compete with most paints and zinc-rich primers.

VpCI-386 HT Aluminum is superior to many coatings with only inorganic pigments. The resistance has been improved by using a highly corrosion resistant aluminum platelet type pigment with organic corrosion inhibitors. The special combination of additives provides a composite polymer barrier that significantly retards the reaction of metal ionization and repels water. A protective film is adsorbed onto metal surfaces. It protects against corrosive electrolytes and aggressive environments, thus preventing corrosion.

VpCI-386 HT Aluminum provides a fast-drying thixotropic coating that is resistant to sagging or running. This dry-to-touch film offers extended protection for sheltered, unsheltered, outdoor, or indoor conditions. Thermally stable when dried from -150°F to 700°F (-78° to 371°C). The coating is ultraviolet resistant. It gives optimal outdoor performance without cracking or chipping upon prolonged exposure to sunlight.

FEATURES

- Heat resistant up to 700°F
- Fast-drying
- UV resistant
- Optimal outdoor performance

MIXING INSTRUCTIONS

This coating is supplied in a single component. Power agitate at low speed to a uniform consistency using a "squirrel cage" type mixer, hand-held drill mixer, or other equivalent method.

APPLICATION

VpCI-386 HT Aluminum can be used as a topcoat/primer. When solvent-based topcoats are applied over VpCI-386 HT Aluminum, compatibility must be checked. VpCI-386 HT Aluminum can also be used as a topcoat with Cortec® VpCI-374 or VpCI-395 as a primer.

Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application and the temperature is at least 55°F (13°C).

VpCI-386 HT Aluminum can be applied via spray, roller, or brush.

METALS PROTECTED

- Carbon steel
- Cast iron
- Aluminum**
- Stainless steel
- Galvanized steel**
- Copper

** A wash primer such as VpCI-373 green applied at 0.5-1.0 dry mils (12.5-25 microns) is recommended before applying the VpCI-386 HT Aluminum to these substrates.



TEST DATA

	CS 1010	Aluminum
Salt Spray (ASTM B117)	500+ hr.*	1000+ hr.
Humidity (ASTM D1748)	1000+ hr.	1000+ hr.

*1.5 to 2-mils (37.5 to 50 microns)

Passes:

ASTM D-2485-91: Standard Test Methods for evaluating coatings for High Temperature Service (Method A) (After heating)

Conventional Spray

Manufacturer	Gun Model	Tip/Aircap Combination
DeVilbiss	MBC or JGA	704E
Binks	#18 or #62	66PE

Fluid hose should be 3/8" (0.95 cm) I.D. with a maximum length of 50 feet (15.2 m). Pot should always have dual regulation and be kept at same elevation as spray gun.

Airless

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

Hose should be 3/8" (0.95 cm) I.D. minimum, but a 1/4" (0.64 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" (0.3-0.4 cm) tip at 1200-1700 psi (83-117 bar).

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

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

Note: Similar equipment may be suitable.

PACKAGING AND STORAGE

VpCI-386 HT Aluminum is available in 5 gallon (19 liter), 55 gallon (208 liter), liquid totes, and bulk. Keep product from freezing. Avoid temperatures higher than 75°F (24°C) while in storage.

TYPICAL PROPERTIES

Appearance	Medium Grey Aluminum
pH	8.5-9.5 (Neat)
Density	8.3-8.8 lb/gal (0.99-1.05 kg/l)
Non-volatile Content Fully Cured	35-40% 7 days at 77°F (25°C) 55% RH
Dry Film Thickness (per coat)	1.0-2.5 mils (25-62.5 microns)
Theoretical Spread Rate	224-561 ft ² /gal (1-2.5 mils) 5.2-14m ² /l (25-67.5 microns)
Dry to Touch Time	30 minutes @ 77°F (25°C)
VOC Regulatory	1.9-2.0 lb/gal (227.6-239.7 g/L)
VOC Actual	0.8-0.9 lb/gal (95.8-107.8 g/L)
Viscosity	700-3,000 cps (6 rpm/#3)
Shelf life	12 months
Temperature Resistance (Fully Cured)	-150°F to 700°F (-78°C to 370°C)

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