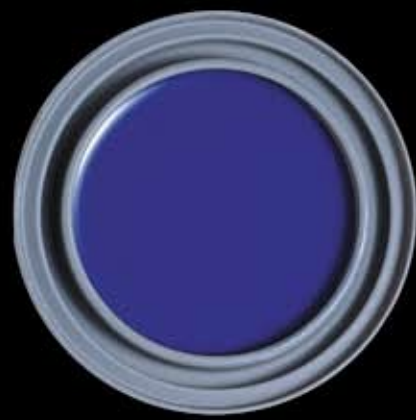




High Performance Coatings



CORTEC
CORPORATION

Environmentally Safe VpCl®/MCl® Technologies



Cortec® V_pCI™ Products solve a wide variety of corrosion problems

V_pCI's protect a multitude of metal products. Spraying or dipping metals with V_pCI's provides fast and economical protection for exterior and interior surfaces. Our technically trained staff can help you decide which product you need for long lasting and complete protection of your corrosion sensitive products.



Productivity, investment protection and cost reduction

The total economic loss from metal corrosion can approach a staggering 5%. This huge loss comes from products that must be sold as a lower grade; or must be repickled, reprocessed or scrapped due to corrosive attack while in the plant. This leads to lost productivity. The high cost of corrosion also includes rust claims and freight costs for returned goods.

The Industrial-Strength Edge in Safe V_pCI™ Corrosion Protection

Cortec® offers environmentally safe solutions for all of your corrosion problems.

Our temporary coatings come off as easily as they go on, and last for years when necessary.

Cortec® coatings provide temporary protection during in-plant processing, shipment or storage. Our coatings offer the same performance/environmental standards as permanent applications, and are easily removed with our, or any, environmentally safe cleaner. In many situations, they do not need to be removed at all.



Cortec's temporary coatings offer years of protection, but can also be easily removed after shipping or storage.

Cortec® coatings provide permanent protection for field service, corrosive maintenance and OEM coatings.

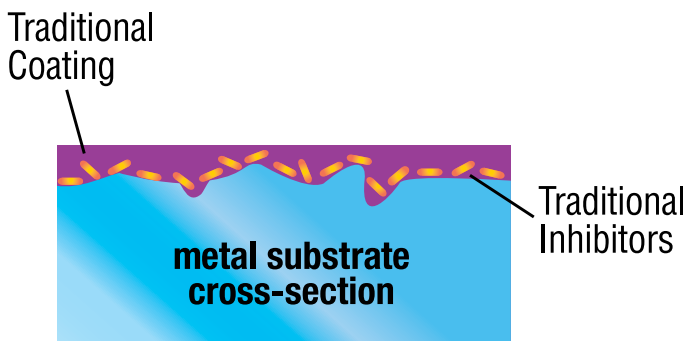
Cortec® can recreate your current colors with a customized formula, or simply match it from our extensive list of standard colors. Most Cortec® coatings have outstanding UV resistance capabilities. Cortec® products also have excellent gloss retention, which is important when aesthetics are a consideration.

With environmentally safe VpCI™ technology, your equipment and products will be effectively protected against humidity, saltwater oxidizing atmospheres and corrosive industrial, marine and tropical environments.

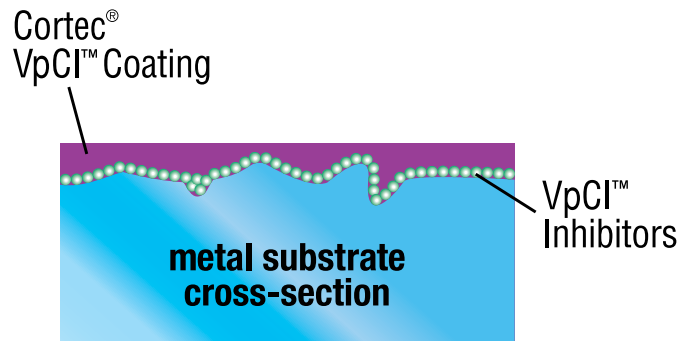


Cortec's permanent coatings provide long-term VpCI™ and barrier corrosion protection.

Traditional coatings vs. Cortec® VpCI coatings



Traditional coatings rely on sacrificial metals (zinc, chromates, aluminum) for inhibition. Due to the large particle size of these inhibitors, gaps exist which allow corrosion to start and eventually expand, causing coating failure.



Cortec® VpCI™ coatings use the patented VpCI™ technology to protect the metal substrate with a tight bonding molecular structure. This system eliminates the gaps which occur with traditional inhibitors and prevent corrosion from starting.

permanent PRIMERS

Typically applied as a base coat prior to topcoat. Enhances the long-term performance of the total corrosion control coating system.

Water based

VpCI-373™

Fast Drying Chromate Primer Replacement

- Conforms to MIL-P-15328D
- Excellent intercoat adhesion

VpCI-374™

Long Lasting Performance Primer

- High solids
- Works well with waterborne topcoats
- Resists sagging
- Effective in indoor and outdoor environments

VpCI-397™

High Temperature Primer

- Extremely hard (9H pencil hardness)
- High temperature capabilities (1100°F (593°C))
- MER resistant

CorrVerter™

VpCI Rust Converter and Primer

- Excellent for rusty or poorly prepared steel surfaces
- Penetrates and eliminates rust
- Stops further rusting
- Can be used as a primer

Epoxy

VpCI-393™

Tight-Sealing, Penetrating Film Primer

- Excellent for use over pre-rusted steel
- Also seals concrete or wood
- 2K system

VpCI-395™

Fast Drying Water Based Epoxy for Severe Conditions

- Excellent adhesion on difficult-to-adhere-to substrates
- Outperforms comparable epoxies by 20%
- High solids
- VOC compliant
- 2K system

Urethane

VpCI-396™

Our Most Durable Long Lasting Coating Available

- Moisture-cure
- Single component package
- Can be applied at low temperatures
- Excellent chemical resistance
- Extremely long-lasting



Permanent TOPCOATS

Designed for long-term durability, Cortec® coatings are the second component of the total corrosion control coating system.

Water based

VpCI-383™

Immersion Coating

- Permanent acrylic coating
- Strong adhesion at thin mil thickness
- Easily topcoated
- Custom matched colors
- Weldable

VpCI-385™

Non-Skid Coating

- Good adhesion
- Formulated for floors, ramps, stairs

VpCI-386™

Our Original Topcoat for Multiple Uses

- Permanent acrylic coating
- Available in standard and custom colors
- Can be overcoated
- Gloss finish

VpCI-387™

A High Build Topcoat for Moderate Conditions

- High build acrylic coating
- Effective with or without a primer
- UV resistance
- Semigloss appearance

VpCI-386FR™

Fire Retardant Topcoat

- Passes ASTM-D-3806-79 Fire Retardant Paint Test
- With VpCI-374 gives excellent salt spray protection
- UV resistant

CorrShield® Gold

True Gold Water-Based Coating

- Permanent acrylic coating
- Attractive gold appearance
- Gloss finish

Epoxy

VpCI-365™

Replacement for Coal Tar Epoxies

- High flash point
- Ideal for outdoor or wet environments
- Medium to severe environment applications
- 2K system

TEMPORARY COATINGS

Used over both painted and unpainted surfaces. Provides protection during assembly, storage and shipment. Cortec® coatings are easily removed.

Solvent based

VpCI-367™

Dry Film Temporary Coating

- Excellent salt/humidity resistance
- Removable with EcoLine Cleaner/Degreaser
- Can be overcoated

VpCI-368™

Our Best Temporary Coating

- Outdoor coating
- Firm, wax-like film
- UV resistance
- Conforms to MIL-C-16173E (Grade 1 & 2), QPL product
- NSN 8030-00-62-6950
- NATO 6850-66-132-5848
- NATO 6850-55-132-6099

VpCI-369™

Self-Healing Barrier Coating

- Self-healing film
- Excellent lubricity
- Conforms to MIL-C-16173E (Grades 1, 2 & 4), QPL product
- NSN 8030-00-244-1297

Water based

VpCI-372™

Strippable, Peelable Coating

- Dry film
- Fast drying
- Can be disposed of as solid waste when removed
- Effective for masking operations

VpCI-384™

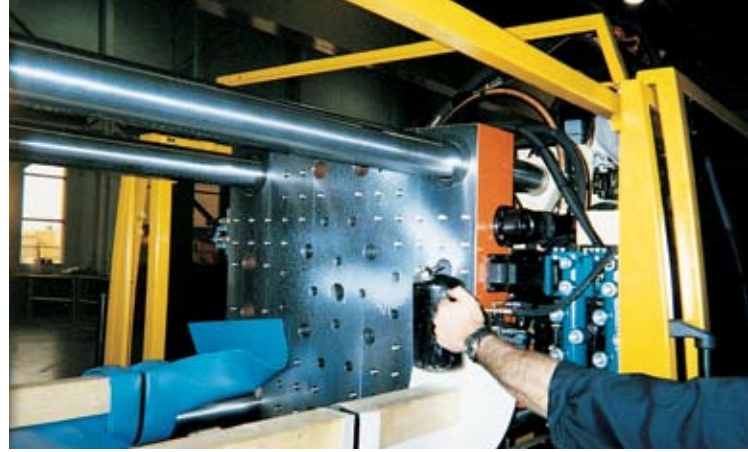
Two Component Urethane Finish Coat

- Very hard coating
- Excellent solvent resistance
- Excellent flexibility
- High gloss when fully cured
- Excellent adhesion to moisture cure urethanes even when fully cured

VpCI-388™

Removable Tack Free Coating

- Excellent for long-term indoor corrosion protection
- Dries clear, firm
- Environmentally friendly disposal



VpCI-389™

Waxy Film Coating for Severe Conditions

- Excellent for long-term outdoor applications
- Excellent salt spray resistance
- Stays slightly tacky

VpCI-390™

Hard Film Temporary Coating

- Excellent salt spray resistance
- Dries hard, non-tacky
- Easily removed

VpCI-391™

Non-Tacky Water Based Coating

- Excellent salt spray resistance
- Dries hard, non-tacky
- Easily removed
- Custom colors available

CorrShield® Strippable Coating

- Excellent salt spray resistance
- Dry film
- Provides mechanical and corrosion protection
- Custom colors available

CorrShield® VpCI Transit Coating for Shipping and Storage

- Waxy film
- Zero VOC
- Easily removable
- Dilutable



		Product	Film Type	Dry Film Thickness mil (µm)	Dry Time	VOC g/l (lb/gal)	Solids %	Coverage ft ² /gal (m ² /l)	Application Method	
Permanent Coatings	Primers	Water-Based	VpCI-373™	Hard	0.5-1mil (12.5-25 µm)	20 min.	151 (0.17)	33	1050 (26.2)	Spray, dip, roll, brush
		VpCI-374™	Hard	2 mil (50 µm)	20 min.	150 (1.25)	39	306 (7.5)	Spray, dip, roll, brush	
		VpCI-397™	Hard	1-2 mil (25-50 µm)	2 hrs.	250 (2.04)	33	529 (13.1)	Spray, dip	
		VpCI-CorrVerter™	Hard	2-5 mil (50-125 µm)	2 hrs.	70 (0.56)	56		Dip, roll, brush	
		Epoxy	VpCI-393™	Hard	0.5-1mil (12.5-25 µm)	8 hrs.	0	100	1590 (38.8)	Spray, dip, roll, brush
		VpCI-395™	Hard	2 mil (50 µm)	10 min.	150 (1.25)	60	400 (9.7)	Spray	
	Urethane	VpCI-396™	Hard	2-4mil (50-110 µm)	2 hrs.	330 (2.75)	70	561 (13.53)	Spray, dip, roll, brush	
	Topcoats	Water-Based	VpCI-383™	Hard	0.5-1mil (12.5-25 µm)	30 min.	295 (2.46)	36	722 (17.42)	Spray, dip, roll, brush
			VpCI-385™	Hard	5mil (125 µm)	1 hr.	40 (0.40)	35	112 (13.9)	Roll, brush
			VpCI-386™	Hard	1.5-3mil (37.5-75 µm)	1 hr.	150 (1.25)	30	240 (5.8)	Spray, dip, roll, brush
			VpCI-386™ Aluminum	Hard	1.5-2mil (37.5-50 µm)	30 min.	152 (1.27)	34-37	280 (6.9)	Spray, dip, roll, brush
			VpCI-386FR™	Hard	4-8mil (100-200 µm)	30-90 min.	152 (1.27)	46-49	190.5 (4.675)	Spray, roll, brush
			VpCI-387™	Hard	6-8mil (125-175 µm)	1 hr.	150 (1.25)	40	92 (2.2)	Spray, dip, roll, brush
			VpCI-CorrShield® Gold	Hard	1.5-2.5mil (37.5-67.5 µm)	30 min.	152 (1.27)	37-40	320 (7.9)	Spray, dip, roll, brush
Epoxy		VpCI-365™	Hard	3-5mil (75-125 µm)	17 hrs.	225 (1.78)	70	281 (7.0)	Spray, dip, roll, brush	
Temporary Coatings	Solvent-based	VpCI-367™	Hard	2-2.5mil (50-67.5 µm)	8 hrs.	300 (2.5)	66-72	530 (13.1)	Spray, dip, roll, brush	
		VpCI-368™	Waxy	2-3mil (50-75 µm)	30 min.	350 (2.42)	55	300 (7.4)	Spray, dip, roll, brush	
		VpCI-369™	Oily	1-2mil (25-50 µm)	n/a	30 (0.25)	97	800 (19.6)	Spray, dip, roll, brush	
	Water-Based	VpCI-372™	Hard	2-6mil (50-150 µm)	1 hr.	50 (0.42)	57	225 (5.4)	Spray, dip, roll, brush	
		VpCI-388™	Hard	1-2mil (25-50 µm)	1 hr.	135 (1.13)	39	625 (15.1)	Spray, dip, roll, brush	
		VpCI-389™	Waxy	1-2mil (25-50 µm)	1 hr.	170 (1.42)	40	650 (16.1)	Spray, dip, roll, brush	
		VpCI-390™	Hard	2-2.5mil (50-62.5 µm)	8-12 hrs.	226 (2.7)	30-34	257 (6.29)	Spray, dip, roll, brush	
		VpCI-391™	Hard	1-2.5mil (25-62.5 µm)	1-2 hrs.	120 (1.0)	45-50	609 (15.0)	Spray, dip, roll, brush	
		CorrShield® Strippable	Hard	2-2.5mil (50-62.5 µm)	30-45 min.	63 (0.75)	66-72	365 (8.95)	Spray, dip, roll, brush	
		CorrShield® Transit	Waxy	0.5-1mil (50-62.5 µm)	30 min.	0	66-72	642 (15.7)	Spray, dip, roll, brush	

- 1 mil = 25 microns (µm).
- Dividing DFT (dry film thickness) by % Solids will yield recommended WFT (Wet Film Thickness) for application.
- Water-based products should not be allowed to freeze during transport or storage.
- Coatings should only be applied when surface temperature is a minimum of 5°F (2°C) above the dew point.
- Dry times are based on ambient temperature of 70°F (20°C) and 50% relative humidity.

Packaging

Most Cortec® liquid coatings are available in 5 gal (19 liter) pails, 55 gal (208 liter) drums, totes and bulk. Cortec® powder coatings are available in 44 lbs (20 kg) boxes.



Product	Description	Removal/ Cleanup	Topcoat- ability	Length of Protection
VpCI-373™	Soft, thin, flexible primer for adhesion to aluminum, stainless steel, galvanized and difficult-to-adhere-to surfaces. Must be top coated. Good replacement for chromate treatments.	VpCI-433™	Y	Long term
VpCI-374™	Extremely long-lasting primer that can be used with or without topcoat.	VpCI-433™	Y	Long term
VpCI-397™	Extremely hard (9H), high temperature aluminum water based silicone coating with a maximum operating temperature of 1100°F (593°C). Does not require a topcoat.	MEK	Y	Long term
VpCI-CorrVerter™	Non-toxic, water-based primer recommended for application to rusty or poorly prepared steel surfaces.	VpCI-433™	Y	Long term
VpCI-393™	A pre-prime that penetrates and binds loose rust and metal into one film. Flexible, and can be top coated with any of our top coats or epoxies. Contains no VOCs! Excellent salt spray resistance.	MEK	Y	Long term
VpCI-395™	A water-based epoxy primer designed for difficult-to-adhere-to surfaces.	VpCI-433™	Y	Long term
VpCI-396™	A single package moisture cure urethane designed for long-term performance in severe environments.	MEK	Y	25 yrs.
VpCI-383™	An ideal coating for dip applications. For OEM specs. Clear or colors. Semi-gloss appearance. Can be applied at low thickness.	VpCI-433™	Y	3 yrs.
VpCI-385™	A non-skid coating. A primer (VpCI-374™) should be used if applying over metal.	VpCI-433™	Y	6 yrs.
VpCI-386™	Our original top coat for multimetal protection. Clear and colors. High gloss (70).	VpCI-433™	Y	5 yrs.
VpCI-386™ Aluminum	Excellent resistance to salt spray.	VpCI-433™	Y	5 yrs.
VpCI-386FR™	Fire Retardant version of VpCI-386™, Passes ASTM-D-3806-79.	VpCI-433™	Y	5 yrs.
VpCI-387™	A high-build, self-priming coating (higher than VpCI-386™) for outdoor protection.	VpCI-433™	Y	5 yrs.
VpCI-CorrShield® Gold	A brilliant true gold colored water-based coating.	VpCI-433™	Y	5 yrs.
VpCI-365™	Available in three colors: black, aluminum, tan. Excellent resistance to salt spray.	VpCI-433™	Y	10 yrs.
VpCI-367™	Excellent salt spray protection, forms a hard film for medium to long term outdoor storage.	EcoLine™ Cleaner/ Degreaser, Solvents	Y	5 yrs.
VpCI-368™	Our best temporary coating (oil-based). Dries to a non-tacky film. Conforms to MIL-C-16173E (Grade 1). Can be removed.	VpCI-411™	N	5 yrs.
VpCI-369™	Removable oil-based, outdoor coating that provides a lubricating film. Remains wet to touch.	VpCI-410™ Series	N	5 yrs.
VpCI-372™	Our strippable coating, dries semi-transparent. Protects from damaging nicks and scratches.	VpCI-433™	N	3 yrs.
VpCI-388™	A removable tack free, firm coating. Matte finish. Dilutable. Ideal for dip or spray. Long-term indoor storage, short- to medium-term outdoor storage (sheltered).	VpCI-411™	N	3 yrs.
VpCI-389™	Our most protective water-based temporary coating. Excellent salt resistance, dilutable. Forms a lightly tacky film, dries clear, removable. Medium to long-term outdoor storage.	VpCI-411™, 414™	N	3 yrs.
VpCI-390™	Excellent salt spray protection, with a hard coating for medium to long term outdoor storage.	VpCI-411™, 414™	N	3 yrs.
VpCI-391™	Excellent salt spray resistance. Easily removable. Medium to long term outdoor storage, available in custom colors.	VpCI-411™, 414™	N	3 yrs.
CorrShield® Strippable	Strippable coating and available in clear and colors.	VpCI-433™	N	2 yrs.
CorrShield® Transit	Excellent for protecting equipment, parts and tools during shipping and storage.	VpCI-410™ Series	N	2 yrs.



Visit our web site for more information on Cortec® Vapor phase Corrosion Inhibitors™.
CortecVCI.com

Total Corrosion Control™

Cortec® Corporation is dedicated to controlling corrosion at all stages of a product life cycle. Cortec® Corporation has developed a diverse range of corrosion protection products including cleaners, metalworking fluids, water- and oil-based coatings and corrosion inhibitors, rust removers, paint strippers, emitters, powders, packaging foams, paper, films, surface treatments and admixtures for concrete as well as additives for water, oil & polymers. Contact Cortec® for additional brochures and information.

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Shanghai CERTEC Material Technology Co.,Ltd

Authorized Distributor of CORTEC VCI Products

Add : Rm 612 , Building 2, Zheqiao Rd 277, Pudong, Shanghai, China.

Tel: 021-51923318 / 51923316 / 013816395867

E-mail: zy@shcertec.com Http://www.shcertec.com



4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC • E-mail: info@cortecvci.com
www.CortecVCI.com

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