



# CorShield® VpCI®-146

## Corrosion Inhibiting Paper Powered by Nano VpCI® Technology



### PRODUCT DESCRIPTION

Cortec® CorShield® VpCI®-146 is the premium corrosion inhibiting paper in the industry. Our patented Vapor phase Corrosion Inhibiting (VpCI®) Technology has revolutionized the way metals are protected in an enclosed package. CorShield® VpCI®-146 paper provides superior corrosion protection for both ferrous and non-ferrous metals, eliminating the need to stock a variety of papers for all different types of metals and alloys you need to protect. It is fully recyclable/repulpable, which means CorShield® VpCI®-146 can be recycled into other types of paper products such as boxes, cardboard, and other corrugated materials. It also means that it can be “repulped” or made into or mixed with pulp to make new paper products. Additionally, CorShield® VpCI®-146 does not contain any nitrites, phosphates, or silicates.

Cortec® CorShield® VpCI®-146 paper is made from 100% recycled content paper. It is easy to use; there are no chemical concentrations to calculate, no chemical tanks or application system to maintain. Both sides of CorShield® VpCI®-146 paper offer effective protection; just wrap your products in the paper and fold the edges together. Use adhesive tape as needed to hold paper folds in place. The VpCI® coating on the paper vaporizes, reaching all metal surfaces to provide complete corrosion protection. The unique inhibiting action of Cortec® VpCI® forms a very thin and very effective protective layer that does not alter the appearance of products or require removal before further finishing or use. Parts protected with CorShield® VpCI®-146 can be painted, welded, and soldered. The VpCI® protective layer does not influence physical properties of most sensitive electrical components, including conductivity and resistance.

### FEATURES

- Contains no nitrites, phosphates, silicones, chromates, or other heavy metals.
- Fully recyclable, repulpable.
- Commercial equivalent to MIL PRF-3420.
- Protective layer does not need to be removed prior to further surface finishing or coating application.
- Tested by Zagreb, Croatia-Department of Health, for use on food articles.

### BENEFITS

- One product for all ferrous and non-ferrous metals.
- Combines corrosion protection and packaging into one step.
- Effective protection on both sides of paper eliminates packaging guesswork.
- Protects dry or oiled metals during storage, transit, and overseas shipment.
- Effective against aggressive environments including humidity, SO<sub>2</sub>, H<sub>2</sub>S, and galvanic corrosion from dissimilar metals.

### APPLICATION

Cortec® CorShield® VpCI®-146 paper can be used to protect products for storage and shipment in a wide variety of ways: single item packaging or interleaving, end closures for shipping tubes, insert strips for recessed areas in large packages, and as sheet liners or separators between products.

Other typical applications are

- Metal production: coils, wire reels, plate, bar, etc.
- Metal forging and die casting: raw and machined forgings and castings.
- Metalworking: stamping, sheet metal work, springs, bearings, fasteners, tubes, pipes, nails, etc.
- Finished products: engines, machinery, equipment, tools, hardware, appliances, instruments, motors, etc.
- Electrical and electronic components, controls, etc.

Products should be packaged as soon after cleaning as possible, after being completely dried of residual water. Keep the VpCI® paper as close to the surface of the product as practical, leaving no barrier between the VpCI® paper and the metal surface to be protected.

### METALS PROTECTED

- Carbon Steel
- Stainless Steel
- Galvanized Steel
- Cast Iron
- Aluminum Alloys
- Copper
- Brass (≤30% Zn)
- Solder

## SIZES

Standard Sizes, 35 lb/3000 ft <sup>2</sup> (57 g/m <sup>2</sup> )			
Roll Stock	Sheets	Perforated Rolls	
12" x 600' (60.1 cm x 182.9 m)	4" x 8" (10.2 cm x 20.3 cm)	12" x 12" x 600' (30.5 cm x 30.5 cm x 182.9 m)	
18" x 600' (45.7 cm x 182.9 m)	6" x 6" (15.2 cm x 15.2 cm)		
24" x 600' (60.1 cm x 182.9 m)	9" x 9" (22.9 cm x 22.9 cm)		
36" x 600' (91.4 cm x 182.9 m)	10" x 10" (25.40 cm x 25.40 cm)		
48" x 600' (121.9 cm x 182.9 m)	12" x 12" (30.5 cm x 30.5 cm)		
36" x 1200' (91.4 cm x 365.76 m)	16" x 16" (40.6 cm x 40.6 cm)		
	18" x 18" (45.7 cm x 45.7 cm)		
	24" x 24" (61 cm x 61 cm)		
	36" x 36" (91.4 cm x 91.4 cm)		
A wide variety of stock and custom sizes and constructions are also available upon request in 30 lb (49 g/m <sup>2</sup> ), 35 lb (57 g/m <sup>2</sup> ), 40 lb (65 g/m <sup>2</sup> ), and 60 lb (98 g/m <sup>2</sup> ) paper.			

## TYPICAL PROPERTIES

Property	Unit	Value	
Basis Weight	lbs/3000 ft <sup>2</sup> (g/m <sup>2</sup> )	35 ± 1.5 (57 ± 2.5)	
Caliper	Mils (μm)	4.0 ± 0.2 (100 ± 5)	
Tear Strength	gms	CD*	50 ± 5
		MD*	70 ± 10
Tensile Strength	lb <sub>p</sub> /in (N/mm)	23 (4)	
Burst Strength (Mullen Test)	Psi (kPa)	20 (138)	

\*CD = Cross Direction

\*\*MD = Machine Direction

## PACKAGING AND STORAGE

To ensure best product performance, store in original packaging, indoors, and out of direct sunlight at 40-100 °F (4-38 °C). Shelf life: 2 years.

### 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**

### LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on tests Cortec® Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed.

Cortec® Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec® Corporation's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Cortec® Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

Cortec® Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products. BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE.

AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec® Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO CASE SHALL CORTEC® CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



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  
<https://www.cortecvci.com>  
<https://www.cortecpackaging.com>

Printed on recycled paper 100% post consumer

Revised: 06/11/19. Supersedes: 7/30/15. ©Cortec Corporation 2002-2019 of Cortec Corporation.  
 All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited. 2019, ©Cortec Corp. ISO accreditation applies to Cortec's processes only.

Distributed by: