







## HIGH PERFORMANCE VPCI® PACKAGING

# **VpCI®-149, Corrosion Inhibiting Paper**



#### **PRODUCT DESCRIPTION**

Cortec VpCI-149 is a unique corrosion inhibiting paper for the protection of a wide variety of metals. Formulated to provide extra protection to sensitive metals such as copper, aluminum, and cast iron; VpCI-149 is an excellent product for virtually all packaging needs. Manufactured using a neutral natural kraft paper, the coating provides a very soft and conformable feel to the paper. It wraps easily around metal parts, making it for easy to use. Since it is not a saturated paper it will not tear like many other VCI papers.

Designed specially to provide a superior level of VpCl protection compared to other VCl papers, VpCl-149 can be used for a variety of applications. The soft feel makes it easy to use when individually wrapping parts, while the strong vapor phase protection makes a great product for interleaving and protecting void spaces.

Cortec's VpCl-149 paper is made from the highest quality neutral natural kraft paper: our paper is made without the use of chlorine or other chemical bleaching. This eliminates package contamination found with other competing VCl/VPl papers. VpCl-149 is easy to use. There are no chemical concentrations to calculate, no chemical tanks or application systems to maintain. Just wrap your products in the paper, and fold edges together. Use adhesive tape as needed to hold paper folds in place. The VpCl 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 VpCI-149 can be painted, welded, and soldered. The VpCI-149 protective layer does not influence physical properties of most sensitive electrical components including conductivity and resistance.

#### **TYPICAL APPLICATIONS**

Cortec VpCl-149 paper can be used to protect products for storage and shipment in a wide variety of ways: the 149 Kraft wrap for 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.

The typical applications are:

- Metal producing: 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, tube, pipe, nails, etc.
- Finished products: engines, machinery, equipment, tools, hardware, appliances, instruments, motors, etc.
- Electrical, electronic components, controls, etc.

### **FEATURES**

- One product for all ferrous and non-ferrous metals.
- Non-toxic. Contains no nitrites, phosphates, silicones, chromates, or other heavy metals.
- Fully recyclable, repulpable.
- Effective against aggressive environments including humidity, SO<sub>2</sub>, H<sub>2</sub>S, and galvanic corrosion from dissimilar metals.
- Conforms to military specifications MIL-P-3420E.
- Protective layer does not need to be removed prior to further surface finishing or coating application.
- Protects dry or oiled metals during storage, transit, and overseas shipment.
- Natural grade paper eliminates package contamination.
- Combines corrosion protection and packaging into one step.



#### METHOD OF APPLICATION

Products should be packaged as soon after cleaning as possible, but 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.

Use approximately 1 square foot (0.09 m²) of VpCl paper for every 3 square feet (0.28 m²) of surface to be protected, and 1 square foot (0.09 m²) of VpCl paper for every 0.5 cubic foot (0.01 m³) of void space. For long-term storage of up to ten years, enclose the wrapped product in an airtight package.

**Standard Construction:** Neutral natural kraft paper, coated with VpCI material. The paper contains printed logo on reverse side to the coating.

#### **METALS PROTECTED**

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

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

#### TYPICAL PROPERTIES

Test	Cortec VpCI-149
Tensile Strength at Break, ASTM D 882-98, (lbs)	26.71/24.49
Tensile Strength at Peak, ASTM D 882-98, (psi)	9791.34/9672.75
Breaking Factor, ASTM D 882-98, (lbs/in)	26.72/24.49
Tearing strength, ASTM D 1922-94A, (Grams)	90.67/80.00
Punture Resistance, ASTM D 3420-95-B, (Joules)	0.16

Machine Direction / Cross Direction

#### **PACKAGING AND STORAGE**

Custom sizes and constructions available upon request, in both a 37 lbs (16.8 kg) and 60 lbs (27.2 kg) /3000sq. ft. (279 sq. m.) paper.

#### 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 said 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 FIFINESS FOR A PARTICULAR PURPOSE. IN ON CASE SHALL CORTEC CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Distributed by:



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 Internet http://www.cortecvci.com

printed on recycled paper 100% post consumer
Revised1/14/13. Cortec Corporation 2007-2013. All rights reserved. Supersedes: 6/19/12.
Cortec® is a trademark of Cortec Corporation. © 2013, Cortec Corporation. All Rights
Reserved. Copying of these materials in any form without the written authorization of Cortec
Corporation is strictly prohibited. ISO accreditation applies to Cortec's processes only.