



CORTEC
CORPORATION

Environmentally Safe VCI/MCI® Technologies



VCI



VCI-144 EcoWrap™

Barrier Coated Paper —
Designed for barrier protection from moisture and other contaminants. Replaces wax and polycoated papers. EcoWrap™ is fully recyclable and is the first product in its class to be repulpable.

VCI 146

Corrosion Inhibiting Paper —
High quality VCI-coated natural-base paper that eliminates packaging contamination found with other VCI/VPI papers.

VCI-144/146

Corrosion Inhibiting Papers

papers

Description

CORTEC® VCI-144 EcoWrap™ and VCI-146 are the premium corrosion inhibiting papers in the industry. Our patented vapor corrosion inhibiting technology has revolutionized the way metals are protected in an enclosed package. CORTEC® VCI-144 and VCI-146 papers provide superior corrosion protection for both ferrous and non-ferrous metals. CORTEC® VCI-144 and VCI-146 multimetal papers eliminate the need to inventory a variety of papers for all of the different types of metal you need to protect. VCI-144 and VCI-146 are environmentally safe, non-toxic, biodegradable and fully recyclable/repulpable. They offer true vapor corrosion protection without the use of any nitrites or other hazardous compounds.

CORTEC® VCI papers are made from the highest quality neutral natural kraft paper. This means that our papers are made without the use of any chlorine or other chemical bleaching. This eliminates package contamination found with other competing VCI/VPI papers. In addition, the paper basestock for the VCI/VPI coatings is produced with closely packed cellulose fibers which form a relatively non-permeable sheet. This attribute produces a uniform coating, as well as prevents the coating from striking through the paper. Another advantage of this property in CORTEC® papers is that the VCI is localized on the side where it is needed most.

Features

- One product for all ferrous and non-ferrous metals.
- Biodegradable. Contains no nitrites, phosphates, silicones, chromates or other heavy metals.
- Fully recyclable, repulpable.
- Effective against aggressive environments including humidity, SO₂, H₂S and galvanic corrosion from dissimilar metals.
- Conforms to military specifications MIL-P-3420E.
- Protective film 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.
- Good moisture barrier and resistant to oils (VCI-144).
- Natural grade paper; eliminates package contamination.
- Combines corrosion protection & package into one step.

Typical Applications

CORTEC® VCI-144/146 Papers can be used to protect products for storage and shipment in a wide variety of ways: the 146 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.

As a part of the 140 Series, Cortec® offers various waterproof papers: a polycoated moisture barrier wrap for sheltered outside storage and a fiber reinforced heavy duty coil wrap or woven wrap for unsheltered outside storage.

Typical Applications (continued)

- Metal producing: coils, wire reels, plate, bar, etc.
- Metal forging and die casting: raw and machined forgings and castings.
- Metalworking: stampings, sheet metal work, springs, bearings, fasteners, tube, pipe, jewelry, silverware, etc.
- Finished products: engines, machinery, equipment, tools, hardware, appliances, instruments, motors, etc.
- Electrical and electronic components, controls, printed circuit boards, etc.

Typical Properties

Property	TAPPI Method	Unit	Cortec
Basis Weight	T-410	lbs/3000ft ²	32.5
Caliper (thickness)	T-411	inches	0.0032
Tear-MD	T-411	gms	47.5
Tear-CD	T-411	gms	58.5
Dry Tensile-CD	T-404	lbs/in	11.3
Dry Tensile-MD	T-404	lbs/in	21.4
TEA-CD	T-494	ft-lbs/ft	3.6
TEA-MD	T-494	ft-lbs/ft	1.9
Stretch-CD	T-404	%	4.26
Stretch-MD	T-404	%	1.47
Ink Float	T-530	minutes	0.25
Smooth-nonprint	T-538	Sheffield	240
Smooth-VCI	T-538	Sheffield	231
Internal Bond	T-541	ft-lbs/in	0.165
Abrasion-nonprint	T-476	gm loss/100 rev	0.007
Abrasion-VCI	T-476	gm loss/100 rev	0.002

CD= Cross Direction

MD= Machine Direction

Method of Application

Products should be packaged as soon after cleaning as possible. Keep the VCI Paper as close to the surface of the product as practical, leaving no barrier between the VCI Paper and the metal surface to be protected.

Use approximately 1 square foot (.09 m²) of VCI Paper for every 3 square feet (.28 m²) of surface to be protected, and 1 square foot (.09 m²) of VCI Paper for every 0.5 cubic foot (.01 m³) of void space. For long-term storage of up to ten years, enclose the wrapped product in an airtight package.

Standard Constructions

VCI-146 Kraft (35# neutral natural kraft coated with VCI), VCI-144 polykraft (35# NNK poly replacement).

Packaging and Storage

Standard Sizes: Converter rolls 48" x 11,000 feet (1.22 m x 3,353 m); roll stock 36" x 200 yards (0.91 m x 183 m), 48" x 200 yards (1.22 m x 183 m), and sheeting perfed on the roll 12" x 12" (0.31 m x 0.31 m). Custom sizes and constructions available upon request.

Metals Protected

Mild Steel, Wrought Iron
Copper
Cast Iron, Flake or Ductile
Zinc
Magnesium Alloys
Brass (<30% Zn)
Cadmium
Silver

Copper-Nickel Alloys
Stainless Steel
Solder
Gold Plate
Galvanized Steel
Aluminized Steel
Aluminum Alloys

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

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