ECOsonic®

HIGH PERFORMANCE VpCI® PRODUCTS FOR ELECTRONICS AND ELECTRICALS

EcoSonic® ESD Paper powered by Nano-VpCI®

Static Dissipative Corrosion Inhibiting Paper

PRODUCT DESCRIPTION

Cortec® EcoSonic® ESD Paper combines corrosion inhibiting and static-dissipative properties to provide a complete packaging paper for your valuable items. This product eliminates static electricity buildup through the use of an environmentally friendly coating made from soybean oil that is coated onto the surface of the paper. EcoSonic® ESD Paper performs better on the static half life test (a test with an environment consisting of little or no humidity) than papers with conventional anti-stat coatings consisting of Alkyl Ammonium Chlorides, typical ethoxylated amines, typical imidazolines, phosphated esters, and nonionic based antistat coatings. The antistat protection from EcoSonic® ESD Paper is also thermally stable in excess of 392°F (200°C), pH stable between 2 and 11 at temperatures in excess of 100°F (38°C) for several days. In addition, EcoSonic ESD Paper will provide contact, vapour, and barrier phase corrosion inhibition for ferrous and nonferrous metals. Simply wrap your sensitive electronic metal items in EcoSonic® ESD Paper, and rest assured, that your valuable items will be protected from static electricity buildup and corrosion. EcoSonic® ESD Paper paper is fully recyclable/repulpable, biodegradable, non-toxic, and does not contain any nitrites, phosphates, silicates, or other hazardous compounds.

Made from the highest quality neutral natural kraft paper, without the use of chlorine or other bleaching. This eliminates package contamination found with other competing corrosion inhibiting papers. EcoSonic® ESD Paper 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 the edges together. Use adhesive tape as needed to hold paper folds in place. Parts protected by EcoSonic® ESD Paper can be painted, welded, and soldered. EcoSonic® ESD Paper does not influence physical properties of even the most sensitive electrical components, including conductivity and resistance.

FEATURES

- One product for all ferrous and non-ferrous metals
- Conforms to Performance Specifications MIL-PRF-3420G (vapor inhibiting ability) and MIL-PRF-81705D (Static Decay rate and Surface Resistivity)
- Combines corrosion inhibition, protection from electrostatic discharge and packaging into one step
- Temperature and pH independent antistat properties
- Non-toxic. Contains no nitrites, phosphates, silicates, chromates, or other heavy metals.
- Fully recyclable, repulpable.
- Effective against aggressive environments including humidity, SO_2, H_2S and galvanic corrosion from dissimilar metals.

TYPICAL APPLICATION

EcoSonic® ESD Paper can be used to protect any material capable of being damaged by electrostatic discharge, such as printed circuit boards, integrated circuits, PCB components, telecommunications equipment, electrical panels, electrical enclosures, batteries, and numerous other materials involving electrical with multimetals.

METALS PROTECTED

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

CORTEC CORPORATION

PERFORMANCE

ESD Properties conforms to MIL PRF-81705 D

- Surface Resistivity (ASTM B 257). Between 1 x 10^5 and 10^{12} Ω/sq.
- Static Decay Rate (Method 3046, Federal Std. 101C). Less than 2 seconds

Corrosion Inhibiting Properties conform to:

- MIL-PRF-3420G (vapour inhibiting ability)

METHODS OF APPLICATION

Products should be packaged immediately after cleaning, being completely dried of residual water. Keep EcoSonic® ESD Paper as close to the surface of the item to be protected as practical, leaving no barrier between the paper and the metal surface to be protected. Use approximately 1 square foot (0.09 m^2) of VpCI® paper for every 3 square feet (0.28 m^2) of surface to be protected, and 1 square foot (0.09 m^2) of VpCI® paper for every 0.5 cubic foot (0.01 m^3) 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® and static dissipative material. The paper contains printed logo on reverse side to the coating.

PACKAGING AND STORAGE

Custom sizes and constructions available upon request.

TYPICAL PROPERTIES

Property	TAPPI Method	Unit	EcoSonic® ESD Paper
Basis Weight, lbs	T-410	Lbs/30000 ft^2 (g/m^2)	35±2 (57±3)
Caliper (thickness)	T-411	Mils (μm)	3.5 (93)
Tear-MD	T-411	gms	32
Tear-CD	T-411	gms	45
Smoothness	T-538	sheffield	200
Smoothness VpCI® side	T-538	sheffield	250

CD- Cross Direction

MD- Machine Direction

STANDARD TEST METHODS

TAPPI T-410	Basis Weight
TAPPI T-411	Caliper Thickness, Tear Strength
TAPPI T-494	Dry Tensile/TEA
TAPPI T-404	Stretch
TAPPI T-530	Ink Float
TAPPI T-538	Smooth
TAPPI T-541	Internal Bond
TAPPI T-476	Abrasion
NACE TM0208-2008	Vapour Inhibiting Ability
NACE RP0487-2000	Selection of Rust Preventives
MIL-PRF-3420H	VCI Treated Wrapping Materials, Opaque
MIL-PRF-81705 D	ESD Properties

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

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CORTEC CORPORATION

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

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www.hitek-ltd.co.uk
+44 (0)1724 851678
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