



**CORTEC**  
CORPORATION

Environmentally Safe VpCI®/MCI® Technologies

## EcoSonic® ESD Self-Seal Bubble Bags powered by Nano VpCI®

### DESCRIPTION

EcoSonic® ESD Self-Seal Bubble Bags powered by Nano VpCI® combine Vapor phase Corrosion Inhibitors with self-seal cushioning packaging bubble bags and ESD protection to safeguard sensitive electronic equipment from corrosion, physical damage, and triboelectric charge generation. They are also available in a non-ESD version.

EcoSonic® ESD Self-Seal Bubble Bags work by saturating the enclosed airspace with Vapor phase Corrosion Inhibitors that form a protective molecular layer on all packaged metals without leaving behind a noticeable film or residue. The bubbles serve as cushioning, dunnage, and void fill material. EcoSonic® ESD Self-Seal Bubble Bags are #4 recyclable.\*

### PACKAGING & STORAGE

Available in 6 x 8 in (15.2 x 20.3 cm) and 10 x 12 in (25.4 x 30.5 cm) bag sizes.

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

Shelf life: 1 year

### HIGH PERFORMANCE VpCI® PACKAGING



### FEATURES

- Easy to use
- Dual function: cushioning and corrosion protection
- No interference with subsequent processing (i.e., painting, welding, cleaning, soldering)
- No adverse effects on plastic (lexane), optics, elastomers, and other non-metallics
- Passes NACE TM0208-2018 standard for corrosion protection
- Passes German TL-8135-002 standard for corrosion protection

### BENEFITS

- Cushions sensitive items
- Protects metals from corrosion
- Protects against triboelectric charge generation (ESD version only)

### METALS PROTECTED

- Carbon Steel
- Aluminum
- Copper
- Silver
- Brass
- Stainless Steel

### APPLICATION

Place item in bag. Peel off white strip and fold the top of the bag over to seal.

\* Remove adhesive strip before recycling.

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## TECHNICAL PROPERTIES

ESD properties apply to the inside of the bag:

- Surface Resistance:  $<1 \times 10^{11}$
- Static Decay Rate:  $<2$  seconds

Property		Test Method	Units	EcoSonic® ESD Bubble Film	Cor-Pak® VpCI® Self-Seal Bubble Bags
Caliper		ASTM D6988	mil ( $\mu\text{m}$ )	5.00	5.00
Breaking Factor	MD	ASTM D882-02	lbs/in (N/m)	19.02 (3330.91)	14.57 (2551.60)
	CD			17.03 (2982.41)	15.99 (2800.28)
Tensile Strength at Break	MD	ASTM D882-02	psi (kPa)	3804.00 (26,227.66)	2913.00 (20,084.43)
	CD			3406.00 (23,483.54)	3197.00 (22,042.54)
Elongation at Break	MD	ASTM D882-02	%	859.52	557.89
	CD			921.48	888.91
Yield Strength	MD	ASTM D882-02	psi (kPa)	1737.44 (11,979.23)	2129.98 (14,685.70)
	CD			1602.83 (11,051.12)	1547.79 (10,671.64)
Tear Strength	MD	ASTM D1922-06a	gram force (lbf)	1651.20 (3.64)	1587.20 (3.50)
	CD			2393.60 (5.28)	1894.00 (4.18)
Dart Drop Impact Resistance		ASTM D1709-04 Test Method A	grams (lbs)	562.20 (1.24)	513.70 (1.13)
Puncture Resistance	Outside	MIL-STD-3010, TM 2065	lbf (gf)	6.80 (2893.92)	7.21 (3270.40)
	Inside			7.49 (3397.41)	8.12 (3683.17)
Seal Strength		ASTM F88-99	lbs/in (N/m)	8.65 (1514.85)	9.45 (1654.95)

*Typical values represent average laboratory values and are intended as guides only, not as specifications*



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