

ADE, Inc.

# TECHNICAL DATA

Chicago, IL

*Product*

*Description*

**CANCEL® 3 Metalized Amine Free ¼” REINFORCED CELL CUSHIONING MATERIAL**

*Description:*

**Cancel 3 Metalized Amine Free Cushioning is a static free ¼” thick material formulated with an antistatic additive suitable for stress sensitive polycarbonate packaging applications. The material is reinforced with a metalized composite top film, designed to provide ESD and EMI shielding along with physical protection.**

*Composition and Structure:*

*Cushioning:*

- **Low and linear low density polyethylene (LDPE and LLDPE).**
- **Proprietary internal Amine Free antistatic additive.**
- **Comprised of adjoining tapered cells that are hexagon shaped on the film (flat) side and rounded on the other.**

*Top film*

**2.0 mil composite of a 0.5 mil vacuum metalized (aluminum) polyester laminated to a 1.5 mil static dissipative polyethylene. The metalized side of the polyester is laminated “in” to the polyethylene. The polyethylene side is laminated to the Cancel and the exposed polyester side is coated with a static dissipative compound.**

*Put-ups:*

<u>Description</u>	<u>Put-up</u>
Rolls	Poly bagged bundles. 300 ft. long, by 48” wide, by 35” diameter.
Sheets	Corrugated cases typically containing 0.5 MSF of sheets/case.
Die-cuts	Corrugated cases. Quantity dependant on shape and size.

*Product Tolerances:*

<u>Form</u>	<u>Description</u>	<u>Dimension</u>
Rolls	Slit width	Min. 2” to max. 48”
Sheets	Size	Min. 3” by 6”
Die-cuts	Shape and size	As specified

*Dimensional Tolerances:*

<u>Description</u>	<u>Rolls</u>	<u>Sheets</u>	<u>Die-cuts</u>
Length	+/- 5%	+/- ¼”	+/- 1/8”
Width (slit rolls)	+/- ¼”	+/- ¼”	+/- 1/8”
Width (48” bundles)	- 1/4”, + ½”		
Thickness	+/- 1/32”	+/- 1/32”	+/- 1/32”

*Physical Properties (Top Film):*

<u>Property</u>	<u>Method</u>	<u>Typical Result</u>
Thickness	ASTM D2103	2.0 MILS
Tensile Strength	ASTM D882	> 15 lbs.
Puncture Resistance	FTMS 101C, Method 2065	> 8 lbs.
Transparency	ADE, Inc. # G216	> 40%

*Physical Properties (finished Product):*

<u>Property</u>	<u>Method/Requirement</u>	<u>Typical Results</u>
Workmanship	ADE, Inc./must comply	complies
Heat Sealability	ADE, Inc./ 4 lb weight	no separation
Polycarbonate Compatibility	EIA 564	up to 158° F

*ESD Properties (Finished Product):*

<u>Property</u>	<u>Method</u>	<u>Typical Value</u>
Surface Resistivity	EOS/ESD S11.11	
Cell and film sides		< 1.0 X 10(12) ohms/square
Buried metal layer		1.0 X 10 (2) ohms/square
Capacitive Probe	EIA 541 (200pf,1.5K ohms)	4.0 to 6.0 volts
RFI Shielding	Mil-STD-285(@ 390 mHz)	4 dB
	(@ 27 mHz)	10 dB

*Compliance Issues:*

**Based on information supplied by our suppliers and strict adherence to our manufacturing procedures, we can state that Cancel ® 3 Metalized AF Cushioning material does not contain Cadmium, Lead, Mercury, Hexavalent Chromium, Polybrominated Biphenyl (PBB) or Polybrominated Diphenyl (PBDE) materials that are banned per RoHS (EU) Directive and CONEG (USA) Regulations.**

*Effects of Solvents and Ultraviolet Rays:*

**Cancel 3 Metalized AF Cushioning material should not be exposed to solvents such as alcohols, ketones or hydrocarbons. Contact with these solutions will remove the conductive surface. Exposure to ultraviolet rays of sunlight will cause fading of the color but will not materially affect the antistatic properties.**