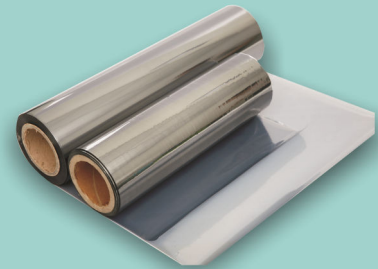


Metal-In Static Shielding Film/Bag

Metal in static shielding film/bag made out of VMPET/PE films for packaging ESD sensitive devices. Heat sealable, These bags are available with or without zipper, metal-in Shatic Shielding Films are designed for products requiring protection against Electrostatic Discharge(ESD). Static shielding bags provides properties intended to protect electronic devices and assemblies from Electrostaic Discharge(ESD)and to avoid charge accumulation on the bag that could be damaging to ESD susceptible devices and assemblies.

SPECIFICATIONS

Electrical properties	Typical Values	Test Method
Surface Resistance		ANSI/ESD STM 11.11
Interior	<10E 11 ohms	
Exterio	<10E 11 ohms	
Metal	100 ohms	
Static Shielding	<15 nJ	ANSI/ESD STM 11.31
Static Decay	<0.03 seconds	EIA 541
Charge Generation	<100 volts	**15kV and 12% RH



Physical Properties

Material Thickness:	3.1 mils±10%	
Light Transmission	40%+5%	ASTM D1003
Puncture Strength	≥12.0 lbs	MIL-PRF-81705D
Seam Strength	No separation	MIL-PRF-81705D
Heating sealing Conditions		
Temperature	250°F -375 °F	
Time	0.5 - 3.5 seconds	
Pressure	30 - 70 PSI	
Tensile Strength	> 5500 psi MD/TD	ASTM D882
Visual inspection	No tears,holes,scratches,etc.	



Shown in open top configuration

Chemical Properties

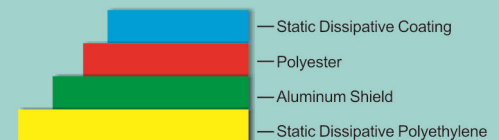
Amines/Amides
Compliant to ROHS,REACH, Halogen free ETC requirement
Not detected

Cleaning Performance

LPC	≤1200 particle /CM2	> 0.5
DHS		
Phenonis (BHT,Ionol 2) and derivatives	≤ 530 ng /cm2	
Hydrocarbons and Others	<117g	
Ethyl Acetate	<0.5	
Total outgassing	<170g	
NVR		
Hexane/IPA	≤4.5ug/cm2	
FTIR		
silicone oil	<5ng/cm2	
IC		
Single Anion	≤ 0.0 1ug/cm2 Nitrate ≤ 0.0 6 ug/cm2	
TotalAnion		
particle content	≤ 0. 10 ug/cm2	
	Talc:particles/CM2,Hard Particles: particles/cm2	

Material Structure

metal-in flat and zipper-closure static shield bags are made from industry-approved polyester/aluminum/polyethylene laminate. ESD bags are made from metallized plastic laminated to dissipative plastic. The metallization and plastic form a shield against discharge and Electric fields. The thickness of the metal layer is approximately 100 angstroms. Shielding bags serve two purposes,preventing the ESD sensitive components sealed within the bag from charging up via field induction and protect the device from a direct contact (outer bag surface) with an ESD event.



Available flat with open top or with a zipper,adhesive tape or other style closure.

