ANTISTAT™
ESD & PRODUCTION CONSUMABLES

PRODUCT

Static Shielding Bag - Grip Seal

TECHNICAL DATASHEET

DESCRIPTION

These grip seal, easy access static shielding bags are designed to protect sensitive electronic devices against ESD during transit and whilst kept in storage.

FEATURES

- Metal “Faraday cage” layer shields products from electric energy inside and prevents static build-up
- Four layer protection guards against charges inside and out
- Semi transparent for easy content identification
- Surface resistance of 10^6-10^{10} Ohms
- Specially processed polyethylene layer (minimum 30% recycled material)
- Custom sizes and print available on request
- Suitable for packing electronic products which are sensitive to static, eg PCBs, electronic components etc.

1) CONFIGURATION(S)

Our bags are available in custom sizes or in several industry standard sizes. Bags are offered in a 2-seal configuration and bottom fold, with our standard flexographically printed artwork.

Please note, the standard measurements for grip seal bags are taken from the grip seal to the bottom fold or seal. Any bags that are longer than 24” will have a 3rd seal along the bottom edge.

2) BAG ARTWORK

Our static shielding bags are produced with the following sample artwork as standard. For further information on bespoke/printed orders, please contact one of our sales team. Please note there is a MOQ of 20,000 bags on all custom printed bags.

To request a quotation or for more information, please call **+44 (0)1473 836200** email **info@antistat.co.uk** or visit **www.antistat.co.uk**

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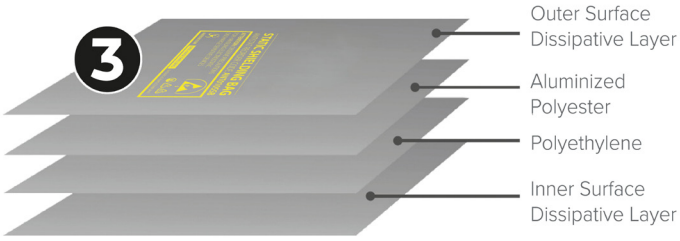
3) CONSTRUCTION

Our static shielding bags are constructed in four layers, consisting of a static dissipative polyester outer layer and a static dissipative polyethylene inner layer with a centre metallised shield layer.
Our bags are manufactured from industry approved polyester and polyethylene laminates. The polyester dielectric works with the metal layer to provide a Faraday effect, the metal layer preventing penetration from damaging electrostatic fields. The specially processed polyethylene (minimum 30% recycled material) keeps tribocharging to a minimum.



TEST CONDITIONS

Results were taken under the following environmental test conditions: Temperature: 23°C / Humidity: 12% RH.

ITEM	TEST METHOD	TYPICAL VALUE
Film thickness	Micron Meter	3Mil 75 micron
Metal layer optical transmission	ASTM D1003 (TOBIAS)	40% +/- 5% optical density
Surface resistance	STM 11.11	10^6-10^{10} Ohms
Time for static removal	FTMS 101B Method 4046 - 5000-0V	<.0.03 Sec
Static shielding - Energy penetration	ESD-STM-11.31 @12% R.H.	<20 nJ
Static shielding - Capacitive probe	EIA 541 Appendix E	<25V
Friction static	E1A541 Appendix C Avg.	Triboelectric nanocoulombs Quartz +0.01 Tefion -0.09
Anti-erosion	FTMS 101C Method 3005	No visible spots
Tensile strength	ASTM D882-91, Method A	MD 6530 psi TD 5800 psi
Tear initiation	ASTM D1004 -94-Notched	MD 2.5 lbs./in TD 2.0 lbs
Puncture resistance	ASTM D3420	>10 psi
Tear resistance	ASTM D882	>8 psi
Burst strength	FTMS 101 C Method 2065.1	50 psi nominal
Heat seal temperature	-	250 - 375 °F
Heat seal pressure	-	30-70 PSI
Heat seal strength	(D1876-93) Vertrod bar sealer/heat	>12 lbs/in width (room temperature)
Breaking elongation rate	ASTM D882-91 Method A	MD 80% TD 85%
Appearance	-	No delamination, burst seal, wrinkle, warp, break, foreign particle adherence, air bubble beyond sealing ≤3mm

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TEST CONDITIONS

The shielding bag is tested accordance with the relevant test standard and requirements.

TEST ITEM	TEST METHOD	MEASURED EQUIPMENT(S)	MDL
Lead (Pb)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2mg/kg
Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2mg/kg
Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis	2mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg

PRODUCT CODE	DESCRIPTION	SIZE (inch)	SIZE (mm)	PACK QUANTITY
013-0001	Static Shielding Bag - Grip Seal	3 x 5	76 x 127	100
013-0018	Static Shielding Bag - Grip Seal	3 x 7	76 x 178	100
013-0044	Static Shielding Bag - Grip Seal	3.4 x 5.4	86 x 137	100
013-0002	Static Shielding Bag - Grip Seal	4 x 4	102 x 102	100
013-0003	Static Shielding Bag - Grip Seal	4 x 6	102 x 152	100
013-0301	Static Shielding Bag - Grip Seal	4 x 8	102 x 203	100
013-0022	Static Shielding Bag - Grip Seal	4 x 14	102 x 355	100
013-0052	Static Shielding Bag - Grip Seal	4 x 24	102 x 609	100
013-0004	Static Shielding Bag - Grip Seal	5 x 8	127 x 203	100
013-0012	Static Shielding Bag - Grip Seal	5 x 10	127 x 254	100
013-0020	Static Shielding Bag - Grip Seal	6 x 8	152 x 203	100
013-0005	Static Shielding Bag - Grip Seal	6 x 10	152 x 254	100
013-0303	Static Shielding Bag - Grip Seal	6 x 18	152 x 455	100
013-0306	Static Shielding Bag - Grip Seal	7 x 11	178 x 279	100
013-0026	Static Shielding Bag - Grip Seal	7 x 15	178 x 381	100
013-0006	Static Shielding Bag - Grip Seal	8 x 10	203 x 254	100
013-0007	Static Shielding Bag - Grip Seal	8 x 12	203 x 305	100
013-0019	Static Shielding Bag - Grip Seal	9 x 12	228 x 305	100
013-0047	Static Shielding Bag - Grip Seal	9.8 x 15.75	250 x 400	100
013-0008	Static Shielding Bag - Grip Seal	10 x 12	254 x 305	100

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PRODUCT CODE	DESCRIPTION	SIZE (inch)	SIZE (mm)	PACK QUANTITY
013-0009	Static Shielding Bag - Grip Seal	10 x 14	254 x 355	100
013-0304	Static Shielding Bag - Grip Seal	12 x 12	305 x 305	100
013-0305	Static Shielding Bag - Grip Seal	12 x 14	305 x 355	100
013-0010	Static Shielding Bag - Grip Seal	12 x 16	305 x 406	100
013-0011	Static Shielding Bag - Grip Seal	12 x 18	305 x 455	100
013-0015	Static Shielding Bag - Grip Seal	16 x 18	400 x 455	100
013-0042	Static Shielding Bag - Grip Seal	18 x 24	457 x 610	100

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