# **Product Data Sheet**

## 3M™ Static Shielding Bag 1900 and 1910

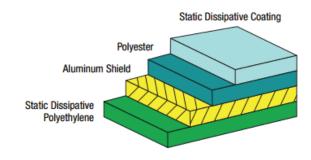
This transparent metal-in static shielding bag is designed to provide a static safe environment for sensitive electronic devices. Bags are printed with an ESD warning symbol and a lot code for traceability. Open top (1900) and ZipTop (1910) styles are available. The bags are heat sealable.

3M Static Shielding Bags 1900 are manufactured from a polyester, metal, polyethylene laminate. The polyester dielectric in concert with the metal layer is intended to provide shielding of Electrostatic Discharge (ESD) and to help minimize the penetration of electric field.

These bags are tested to meet or exceed certain electrical and physical requirements of Static Shielding Bags, ANSI/ESD S541, and to be ANSI/ESD S20.20 program compliant. Bags are RoHS Compliant\* and lead-free\*\*.



3M<sup>™</sup> Static Shielding Bag 1900 and 1910



Physical	Typical Value	Testing Method
Tensile Strength	5100 PSI, 35 MPa	ASTM D882
Puncture Resistance	12 lbs, 53 N	MIL-STD-3010C Method 2065
Seal Strength	9 lbs, 40 N	ASTM D882
Thickness	2.8 mils, .071 mm +/-15%	MIL-STD-3010C Method 1003
Marking Adhesion	Pass	IPC-TM-650 2.4.1
Transparency	40%	Tobias
Electrical	Typical Value	Testing Method
ESD Shielding	<10 nJ	ANSI/ESD STM11.31
Surface Resistance - Interior	<1x10 <sup>11</sup> ohms	ANSI/ESD STM11.11
Surface Resistance - Exterior	<1x10 <sup>11</sup> ohms	ANSI/ESD STM11.11
Static Decay	< 2 seconds	ETS 406D
Cleanliness	Typical Value	Testing Method
Silicone	Not Detected	FTIR
<b>Heat Sealing Conditions</b>	Typical Value	
Temperature	375°F, 190°C	
Time	0.5 – 3.5 seconds	
Pressure	30 - 70 PSI, 206 - 482 KPa	

This product is intended for commercial use only. This product is not on the Qualified Product Listing under the Defense Standardization Program.



## 3M™ Static Shielding Bag 1900 and 1910

3M<sup>™</sup> Static Shielding Bags, Open Top 1900

Dimensions (W x L in.)	Part No.	Dimensions (W x L in.)	Part No.	Dimensions (W x L in.)	Part No.
3 x 5	19035	7 x 15	190715	12 x 16	1901216
4 x 4	19044	8x 8	19088	12 x 18	1901218
4 x 6	19046	8 x 10	190810	14 x 18	1901418
5 x 8	19058	8 x 12	190812	15 x 18	1901518
6 x 8	19068	10 x 12	1901012	16 x 24	1901624
6 x 10	190610	10 x 14	1901014	18 x 18	1901818
		11 x 15	1901115	18 x 24	1901824

**Custom Sizes Available** 

## 3M<sup>™</sup> Static Shielding Bags, ZipTop 1910

Dimensions (W x L in.)	Part No.	Dimensions (W x L in.)	Part No.	Dimensions (W x L in.)	Part No.
3 x 5	19135	6 x 10	191610	11 x 15	1911115
4 x 6	19146	8 x 8	191810	12 x 16	1911216
5 x 8	19158	8 x 12	191812	12 x 18	1911218
6 x 8	19168	10 x 12	1911012	18 x 18	1911818

Custom Sizes Available

3M is a trademark of 3M Company. All other trademarks are owned by their respective companies.

\* RoHS 2011/65/EU Compliant means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty section.

\*\*Lead-free means that the product has less than 2 ppm of lead when tested by ICP-AES, with reference to EPA method 3051A/3052.



### **Electronic Solutions Division** Static Control Products

926 JR Industrial Drive Sanford, NC 27332-9733 Toll-Free: 866-722-3736 International: 919-718-0000 Email: 3mstaticinfo@mmm.com www.3Mstatic.com

**Open Top Bag** ZipTop Bag SEAL SEA LENGTH LENGTH

- Standard sizes for prompt shipment (usually same day) Width is measured from inside seam to inside seam.
- Length is measured from the top edge to the bottom fold.

SEAL

- Opening is in the "width" dimension.
- Custom bag sizes are available.

WIDTH

Tolerance (inches): Width -0, +0.250 Length +/-0.125 Offset 0 to 0.250

FOLD

Seal width +/- 0.125

WIDTH

### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

#### Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for one year from the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.