



**Description:**

This product is designed for use in ESD controlled areas where there are ESD sensitive devices and the area is designated as "Lead-Free". All shop travelers are made from a polyester/polyolefin laminated structure. They can be cleaned for use in Class 100 Clean Rooms. This product is designed to hold 8 1/2" x 11" sheets and meets or exceeds the requirements of MIL-PRF-81705D, Type II.

**Electrical Properties:**

Electrostatic Decay:	< 0.05 sec.	per FTMS 101C, Method 4046
Surface Resistance:	<10E11 Ohms	per ANSI-ESD S11.11
ElectroStatic Charge Generation:	< 50 volts	per EIA-541

**Specifications:**

Corrosivity:	Negligible	per FTMS 101C-3005
Elongation @ Break:	500-800%	per ASTM D882
Ball Burst Impact Strength:	20-30 cm/kg	per ASTM D-3420
Transparency:	>90%	per ASTM D-1003
Puncture Resistance:	>10 lbs average	per FTMS 101C-2065
Coefficient of Friction:	0.3 Kinetic, Film to Film	per ASTM D-1894
Tensile strength	MD 5,700 psi TD 6,500 psi	per ASTM D-882
Tear strength	MD 3.0 lbs TD 2.2 lbs	per ASTM D-1004

**Chemical Properties:**

Corrosion	No effect on aluminum, copper, silver, Sn-Pb coated foil, stainless steel, low carbon steel
Polycarbonate Compatible	Yes
No Amines or N-Octanoic Acid	Not present

**Heat Sealing Conditions:**

Temperature:	375-400°F
Time:	0.5 - 4.5 seconds
Pressure:	Minimum 60 PSI

Note: Per ANSI/ESD S541 FOREWORD "This document is a substantial refinement of Electronic Industries Association Standard EIA-541-1988. Updates include the adoption of surface resistance (Ohms) in place of surface resistivity (Ohms/square)"

Per ANSI/ESD S541 section 7.2.2 Resistance of Dissipative Materials "A static dissipative material shall have a surface resistance of greater than or equal to 1.0 x 10^4 Ohms but less than 1.0 x 10^11 Ohms. Packaging materials that are in intimate contact with devices should be dissipative."

**RoHS Compliance Statement**

None of the following materials are intentionally added in manufacturing this product: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) as outlined in the Directive 2002/95/EC Article 4.1. See Desco Industries Inc. letter on-line at [ProtektivePak.com](http://ProtektivePak.com).

SHOP TRAVELER, RoHS, 3mil, 9.5" x 11" O.D., 8.625" x 11" I.D

**PROTEKTIVE PAK**

PROTEKTIVE PAK  
13520 MONTE VISTA AVENUE, CHINO, CA 91710  
PHONE (909) 627-2578, FAX (909) 363-7331  
ProtektivePak.com

**DRAWING NUMBER**  
47120

**DATE:**  
September  
2007