

3M™ Dri-Shield Moisture Barrier Bag 2000

Moisture Barrier Bag ~ Aluminized

3M's Dri-Shield 2000 Moisture Barrier Bag is designed for dry packaging of electronic devices and uses the first structure approved under MIL-PRF-81705 Type I. Dri-Shield 2000 bags are made from multiple layers of metallized polyester and dissipative polyethylene. Bags protect SMD's from moisture and static damage. Flexible structure is easy to vacuum seal. Coded for QC traceability.

Standards

Meets electrical and physical requirements of MIL-PRF-81705 Type 1, EIA 583, EIA 541, EIA 625, and EOS/ESD Standards.

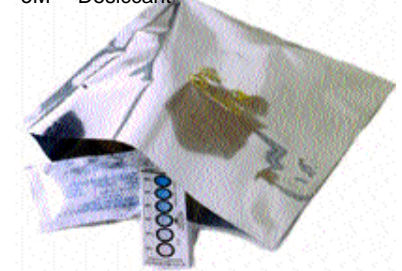
Specifications

Physical Properties:	Typical Values	
MVTR(g/100 sq.in./24 hrs)	<.02	ASTM F 1249
Puncture Resistance	> 20 lbs	FTMS 101 MTH 2065
Thickness	3.6 mils	3M 008
Tensile Strength	40 lb	ASTM D882
Seam Strength	Pass	MIL-PRF-81705
Heat Sealing Conditions:		
Temperature	300°F - 400°F	
Time	0.6 - 4.5 seconds	
Pressure	30 - 70 PSI	
Electrical Properties:		
Surface Resistivity / Resistance	ASTM D257	or ANSI/ESD STM11.11
Interior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Exterior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Metal	100 ohms	
Static Shielding	< 20 volts	EIA 541
Static Shielding	< 10 nJ	EOS/ESD S11.31
EMI Attenuation	45 dB	MIL-PRF-81705
Static Decay	< 0.03 seconds	FTMS 101 MTH 4046
Non-Corrosive	Pass	FTMS 101 MTH 3005
Outgassing	Pass	ASTM E595



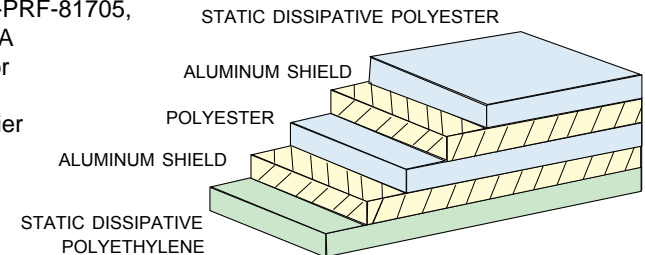
3M™ Dri-Shield Moisture Barrier Bag 2000

3M™ Moisture Barrier Bag with 3M™ Humidity Indicator Card and 3M™ Desiccant



Material Structure

Multiple layers of metallized polyester provide puncture resistance and moisture barrier for this economical dry package. This highly reliable material meets or exceeds MVTR and EMI/RFI/Static Shielding requirements of MIL-PRF-81705, Type I and EIA 583, Type I for static safe, moisture barrier packaging.



See 3M Data Sheets for these related items:

Humidity Indicator Cards (HIC's)

Desiccant

Vacuum Sealers

P R O D U C T D A T A S H E E T

Dri-Shield 2000 Moisture Barrier Bag ALUMINIZED

PRODUCT	ITEM NUMBER	DATASHEET
MOISTURE BARRIER BAG, ALUMINIZED	700(W")(L")	1102-A

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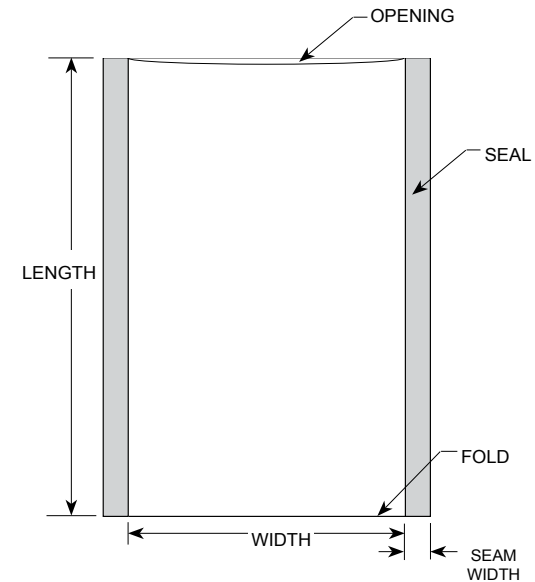
3M™ Dri-Shield Moisture Barrier Bag 2000

Moisture Barrier Bag ~ Aluminized

W"x L"	P/N	W"x L"	P/N	W"x L"	P/N
3 x 5	70035	8 x 10	700810	14 x 30	7001430
4 x 6	70046	8 x 12	700812	15 x 18	7001518
4 x 24	700424	10 x 12	7001012	16 x 18	7001618
5 x 30	700530	10 x 20	7001020	17 x 19	7001719
6 x 8	70068	10 x 24	7001024	18 x 18	7001818
6 x 10	700610	10 x 30	7001030	18 x 24	7001824
6 x 24	700624	12 x 16	7001216		
6 x 30	700630	12 x 18	7001218		

- All standard sizes in-stock/same day shipment.
- Width is measured from inside seam to inside seam.
- Length is measured from the top edge to the bottom fold.
- Opening is in the "width" dimension.
- Custom bag sizes, custom printing, and custom hot stamping are available.
- Most sizes are packed 100 per case.
Small sizes are packed 1000 or 500 per case.

3M™ Dri-Shield Moisture Barrier Bag 2000



How Moisture Barrier Bags Work

Moisture barrier bags work by enclosing a device with a metal or plastic shield(s) that has a high resistance to moisture vapor permeation. Dry devices are placed inside this shield, and the moisture-laden air is evacuated. Desiccant filled pouches scavenge the remaining moisture from the bag's interior. Moisture that penetrates the bag is also entrapped by the desiccant. Humidity indicating cards report the effectiveness of the package upon device use. A label on the bag indicates the amount of exposure time devices are allowed prior to use, and the drying (re-baking) time and temperature if the exposure time is exceeded.

As the barrier property improves, the Moisture Vapor Transmission Rate (MVTR) decreases. Bags with lower MVTR provide better barrier. Aluminum foil provides the best MVTR of about 0.0003. Multiple layers of Aluminized Polyester can provide 0.02 to about 0.005.

Puncture Resistance is an important feature for barrier bags. Sharp tray edges may tear through bags with low puncture resistance.

P R O D U C T D A T A S H E E T

Dri-Shield 2000 Static Shielding Bag METAL-IN

PRODUCT
MOISTURE BARRIER BAG, ALUMINIZED

ITEM NUMBER
700(W")(L")

DATASHEET
1102-A

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