

3M™ Moisture Barrier Bag Dri-Shield 3400

Sizes on Page 2

Moisture Barrier Bag ~ Foil

Dri-Shield 3400 Moisture Barrier Bag is made from a high barrier foil structure, and is designed for dry packaging of electronic devices. Bags protect SMD's from moisture and static damage. Flexible structure is easy to vacuum seal. Lot coded for QC traceability. These bags are tested to meet or exceed certain electrical and physical requirements of IPC/JEDEC J-STD-033, ANSI/ESD S541, EIA 625, and to be ANSI/ESD S20.20 program compliant.

Specifications

Physical Properties:

	Typical Values	Test Method*
MVTR	<.0003 g/100 sq.in./24 hrs	IPC/JEDEC J-STD-033
Puncture Resistance	20 lbs	MIL-STD-3010 2065
Thickness	4 mils	MIL-STD-3010 1003
Tensile Strength	8500 PSI	ASTM D882
Seam Strength	>15 lbs	ASTM D882
Heat Sealing Conditions:		
Temperature	300°F - 400°F	
Time	0.6 - 4.5 seconds	
Pressure	30 - 70 PSI	

Electrical Properties:

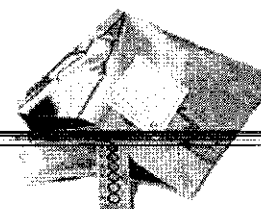
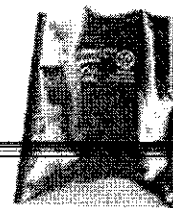
	ASTM D257	or ANSI/ESD STM11.11
Surface Resistivity / Resistance		
Interior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Exterior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Metal	100 ohms	
Static Shielding	< 20 volts	EIA 541
Static Shielding	< 10 nJ	ANSI/ESD STM11.31
EMI Attenuation	45 dB	
Static Decay	< 0.01 seconds	MIL-STD-3010 4046
Silicone or Amine Content	Not detected	FTIR

See 3M Data Sheets for these related items:

Humidity Indicator Cards (HIC's)

Desiccant

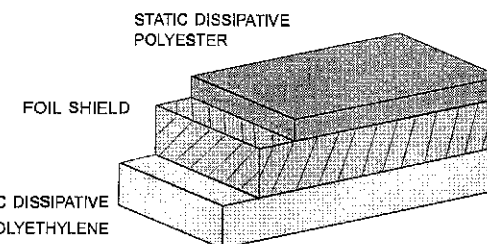
Vacuum Sealers



Moisture Barrier Bag with humidity indicator card, desiccant, and label.

Material Structure

4 mils of static dissipative polymer, aluminum foil, and static dissipative polyethylene provide a very low MVTR. This foil barrier material meets or exceeds the MVTR and EMI/RFI/Static Shielding requirements for static safe, moisture barrier packaging.



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 date 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.

*This product is not on the Qualified Product Listing under the Defense Standardization Program.

PRODUCT DATA SHEET

Dri-Shield 3400 Moisture Barrier Bag FOIL

PRODUCT
MOISTURE BARRIER BAG, FOIL

ITEM NUMBER
D34(W)(L")

DATASHEET
1161-B
98-0799-1070-3

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735
Int: 919-718-0000; Fax: 919-774-8174
email: 3Mstaticinfo@mmm.com; www.3Mstatic.com

3M is a trademark of 3M Company.
All other trademarks herein are the property of their respective owners.

3M

© 3M 2011. All rights reserved.

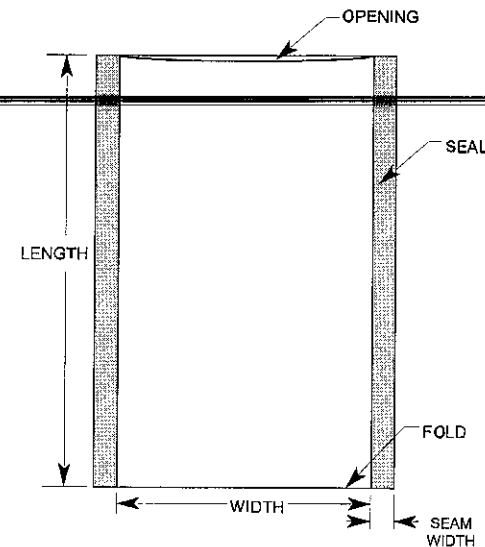
3M™ Moisture Barrier Bag Dri-Shield 3400

Moisture Barrier Bag ~ Foil

W"x L" P/N	W"x L" P/N	W"x L" P/N
10x20 D341020		
10x30 D341030		
16x18 D341618		

Inquire for custom sizes

3M Dri-Shield 3400



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 Foil 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.

- 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.

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

Dri-Shield 3400 Moisture Barrier Bag FOIL

PRODUCT
MOISTURE BARRIER BAG, FOIL

ITEM NUMBER
D34(W")(L")

DATASHEET
1161-B
98-0799-1070-3

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735
Int'l: 919-718-0000; Fax: 919-774-8174
email: 3Mstaticinfo@mmm.com; www.3Mstatic.com

3M is a trademark of 3M Company.
All other trademarks herein are the property
of their respective owners.



© 3M 2011. All rights reserved.

3M™ Moisture Barrier Bag Dri-Shield 2700

Moisture Barrier Bag ~ Aluminized

The 3M Dri-Shield 2700 Moisture Barrier Bag is designed for dry packaging of electronic devices. Made from multiple layers of metallized polyester and heavy gauge dissipative polyethylene, Dri-Shield 2700 bags provide superior puncture resistance and drop test performance. Bags protect SMD's from moisture and static damage. Flexible structure is easy to vacuum seal. Coded for QC traceability. These bags are tested to meet or exceed certain electrical and physical requirements of ANSI/ESD S541, EIA 625, and to be ANSI/ESD S20.20 program compliant.

Specifications

Physical Properties:

	Typical Values	Test Method
MVTR	<.005 g/100 sq.in./24 hrs	ASTM F 1249
Puncture Resistance	30 lbs	MIL-STD-3010 2065
Thickness	7 mils	MIL-STD-3010 1003
Tensile Strength	6800 PSI	ASTM D882
Seam Strength	>15 lbs	ASTM D882
Heat Sealing Conditions:		
Temperature	300°F - 400°F	
Time	0.6 - 4.5 seconds	
Pressure	30 - 70 PSI	

Electrical Properties:

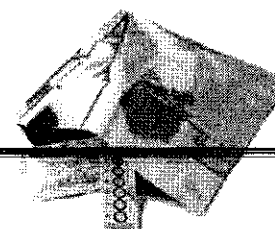
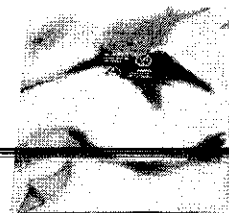
	ASTM D257	or ANSI/ESD STM11.11
Surface Resistivity / Resistance		
Interior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Exterior	<10 ¹² ohms/square	or <10 ¹¹ ohms
Metal	100 ohms	
Static Shielding	< 20 volts	EIA 541
Static Shielding	< 10 nJ	ANSI/ESD STM11.31
EMI Attenuation	45 dB	
Static Decay	< 0.01 seconds	MIL-STD-3010 4046
Silicone or Amine Content	Not detected	FTIR

See 3M Data Sheets for these related items:

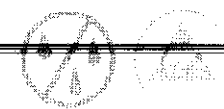
Humidity Indicator Cards (HIC's)

Desiccant

Vacuum Sealers

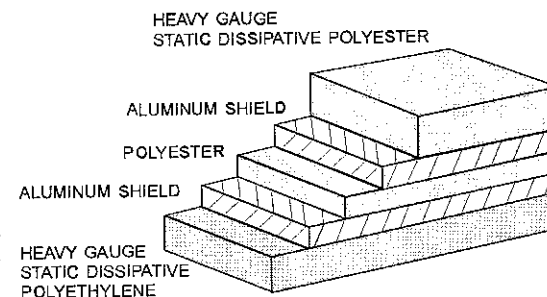


Moisture Barrier Bag with Humidity Indicator Card and Desiccant



Material Structure

7 mils of static dissipative polyethylene and metallized polyester create an exceptional dry package with superior puncture performance. This premium material meets or exceeds the MVTR and EMI/RFI/Static Shielding requirements for static safe, moisture barrier packaging.



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 date 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.**

*This product is not on the Qualified Product Listing under the Defense Standardization Program.

PRODUCT DATA SHEET

Dri-Shield 2700 Moisture Barrier Bag ALUMINIZED

PRODUCT

MOISTURE BARRIER BAG, ALUMINIZED

ITEM NUMBER

D27(W")(L")

DATASHEET

1103-A

98-0799-1073-7

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735

Int: 919-718-0000; Fax: 919-774-8174

email: 3Mstaticinfo@mmm.com; www.3Mstatic.com © 3M 2011. All rights reserved.

3M is a trademark of 3M Company.
All other trademarks herein are the property
of their respective owners.

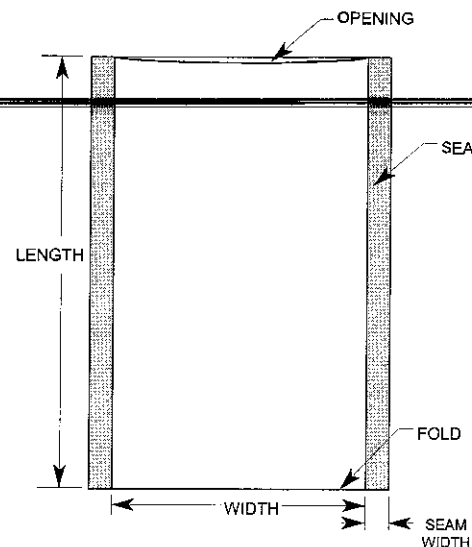
3M

3M™ Moisture Barrier Bag Dri-Shield 2700

Moisture Barrier Bag ~ Aluminized

W"x L" P/N	W"x L" P/N	W"x L" P/N
4 x 6 D2746	10 x 30 D271030	15 x 18 D271518
10 x 12 D271012	10.5 x 18 D2710.518	16 x 18 D271618
10 x 20 D271020	12 x 16 D271216	

3M Dri-Shield 2700



- 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.

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.

PRODUCT DATA SHEET

Dri-Shield 2700 Moisture Barrier Bag ALUMINIZED

PRODUCT
MOISTURE BARRIER BAG, ALUMINIZED

ITEM NUMBER
D27(W)(L")

DATASHEET
1103-A
98-0799-1073-7

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735
Intl: 919-718-0000; Fax: 919-774-8174
email: 3Mstaticinfo@mmm.com; www.3Mstatic.com

3M is a trademark of 3M Company.
All other trademarks herein are the property
of their respective owners.

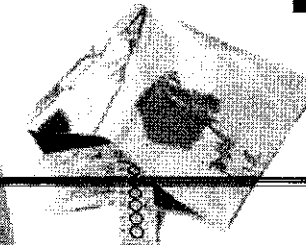
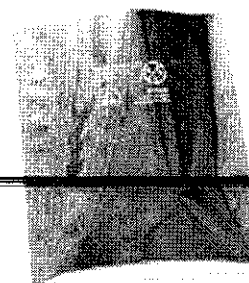


© 3M 2011. All rights reserved.

3M™ Moisture Barrier Bag Dri-Shield 2000

Moisture Barrier Bag ~ Aluminized

The 3M Dri-Shield 2000 Moisture Barrier Bag is designed for dry packaging of electronic devices. 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. These bags are tested to meet or exceed certain electrical and physical requirements of ANSI/ESD S541, EIA 625, and to be ANSI/ESD S20.20 program compliant.



Moisture Barrier Bag with Humidity Indicator Card and Desiccant

Specifications

Physical Properties:

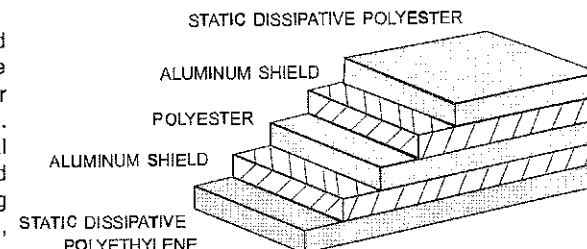
MVTR	Typical Values	Test Method*
Puncture Resistance	<.02 g/100 sq.in./24 hrs	ASTM F 1249
Thickness	> 20 lbs	MIL-STD-3010 2065
Tensile Strength	3.6 mils	MIL-STD-3010 1003
Seal Strength	8700 PSI	ASTM D882
Heat Sealing Conditions:	>12 lbs	ASTM D882
Temperature	300°F - 400°F	
Time	0.6 - 4.5 seconds	
Pressure	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	ANSI/ESD STM11.31
EMI Attenuation	45 dB	
Static Decay	< 0.03 seconds	MIL-STD-3010 4046
Silicone or Amine Content	Not detected	FTIR

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 for static safe, moisture barrier packaging.



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 date 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.**

*This product is not on the Qualified Product Listing under the Defense Standardization Program.

See 3M Data Sheets for these related items:

Humidity Indicator Cards (HIC's)
Desiccant
Vacuum Sealers

PRODUCT DATA SHEET

Dri-Shield 2000 Moisture Barrier Bag ALUMINIZED

PRODUCT

MOISTURE BARRIER BAG, ALUMINIZED

ITEM NUMBER

700(W")(L")

DATASHEET

1102-A

98-0799-1075-2

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735
Int'l: 919-718-0000; Fax: 919-774-8174
email: 3Mstaticinfo@mmm.com; www.3Mstatic.com

3M is a trademark of 3M Company.
All other trademarks herein are the property of their respective owners.



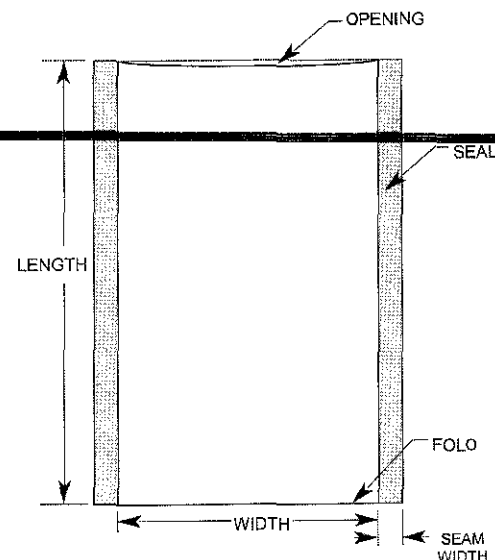
© 3M 2011. All rights reserved.

3M™ Moisture Barrier Bag Dri-Shield 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	

3M Dri-Shield 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.

- 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.

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

Dri-Shield 2000 Moisture Barrier Bag ALUMINIZED

PRODUCT

MOISTURE BARRIER BAG, ALUMINIZED

ITEM NUMBER

700(W")(L")

Q&A SHEET

1102-A

98-0799-1075-2

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735
Int'l: 919-718-0000; Fax: 919-774-8174
email: 3Mstaticinfo@mmm.com; www.3Mstatic.com

3M is a trademark of 3M Company.
All other trademarks herein are the property
of their respective owners.



© 3M 2011. All rights reserved.

3M™ Moisture Barrier Bag Dri-Shield 3000

Moisture Barrier Bag ~ Foil

W"x L" P/N W"x L" P/N W"x L" P/N

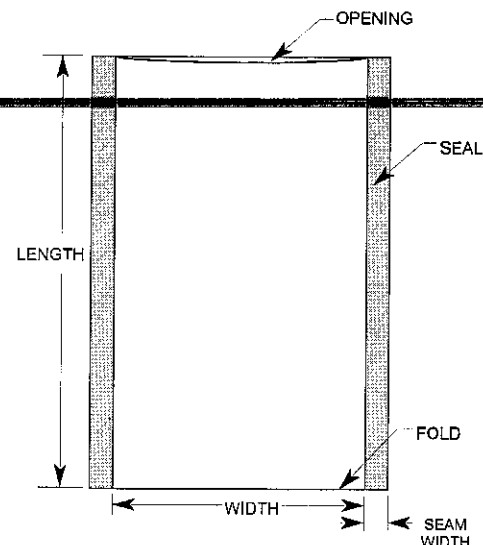
10x20 D301020

10x30 D301030

16x18 D301618

Inquire for custom sizes

3M Dri-Shield 3000



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 Foil 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.

- 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.

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

Dri-Shield 3000 Moisture Barrier Bag FOIL

PRODUCT

MOISTURE BARRIER BAG, FOIL

ITEM NUMBER

D30(W")(L")

DATASHEET

1104-B

98-0799-1072-9

3M Electronic Solutions Division
6801 River Place Blvd
Austin, TX 78726-9000
US and Canada: 866-722-3736
Fax: 866-722-3735

Intl: 919-718-0000; Fax: 919-774-8174

email: 3Mstaticinfo@mmm.com; www.3Mstatic.com © 3M 2011. All rights reserved.

3M is a trademark of 3M Company.
All other trademarks herein are the property
of their respective owners.

