

# 3M™ Moisture Barrier Bag Dri-Shield 3400

## 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.



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



### Specifications

#### Physical Properties:

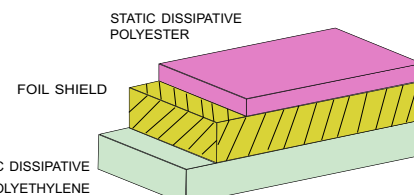
Physical Properties:	Typical Values	Test Method*
MVTR	<.0003 g/100 sq.in./24 hrs	IPC/JEDEC J-STD-033
Puncture Resistance	20 lbs	MIL-STD-3010 2065
Thickness	4 mils	MIL-STD-3010 1003
Tensile Strength	8500 PSI	ASTM D882
Seam Strength	>15 lbs	ASTM D882
Heat Sealing Conditions:		
Temperature	300°F - 400°F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

#### Electrical Properties:

Surface Resistivity / Resistance	ASTM D257	or ANSI/ESD STM11.11
Interior	<10 <sup>12</sup> ohms/square	or <10 <sup>11</sup> ohms
Exterior	<10 <sup>12</sup> ohms/square	or <10 <sup>11</sup> 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

#### 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.



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\*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

## 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

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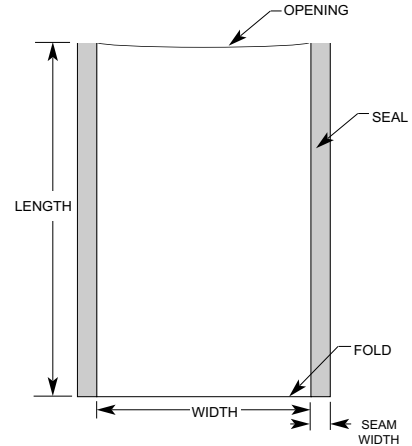
## Moisture Barrier Bag ~ Foil

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

- 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 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.

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

### Dri-Shield 3400 Moisture Barrier Bag FOIL

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MOISTURE BARRIER BAG, FOIL

**ITEM NUMBER**  
D34(W)(L")

**DATASHEET**  
1161-B  
98-0799-1070-3

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