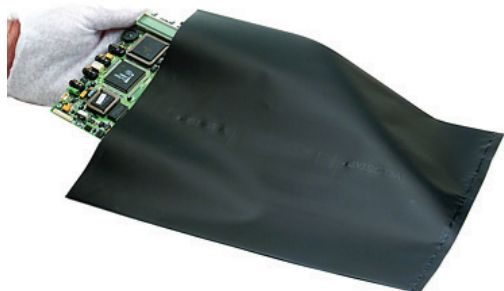


### 3M™ Conductive Film Products

#### 3M™ Conductive Bag 2004

Conductive Bags 2004 are made of opaque, volume-conductive carbon impregnated polyolefin, and are heat-sealable. The bags are designed to dissipate a charge and should not become electrically charged through tribo electrification.



#### 3M™ Conductive Drum Liner 2014

Conductive Drum Liners 2014 are designed to not hold a static charge when properly grounded, and are commonly used in the electronic or chemical industry as a waste container liner.



#### 3M™ Conductive Film 1700

Conductive Film 1700 is opaque, volume-conductive, carbon-impregnated polyolefin, and is commonly used for material handling, shipping and storage in the electronic or chemical industries.



#### 3M™ Conductive Tubing 1724

Conductive Tubing 1724 is made of opaque, volume conductive carbon-impregnated polyolefin, and is used to make bags and sleeves for specialized packaging or storage requirements. The tubing is heat-sealable and can be used on automated packaging lines.



# Product Data Sheet

## 3M™ Conductive Film Products

| Part Numbers and Sizes                            | Typical Value                                                                                                                                                                                   |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3M™ Conductive Bags 2004                          |                                                                                                                                                                                                 |
| Type                                              | Conductive                                                                                                                                                                                      |
| Wall Thickness                                    | 4.0 mil (102 microns)                                                                                                                                                                           |
| Standard Sizes                                    | 5 x 8 in. (12.7 x 20.3 cm)<br>6 x 10 in. (15.2 x 25.4 cm)<br>8 x 12 in. (20.3 x 30.5 cm)<br>10 x 12 in. (25.4 x 30.5 cm)<br>12 x 16 in. (30.5 x 40.6 cm)<br>15 x 18 in. (38.1 x 45.7 cm)        |
| 3M™ Conductive Drum Liners 2014                   |                                                                                                                                                                                                 |
| Type                                              | Conductive                                                                                                                                                                                      |
| Wall Thickness                                    | 4.0 mil (102 microns)                                                                                                                                                                           |
| Standard Sizes                                    | 5 gallon 18 x 24 in. (45.7 x 61.0 cm)<br>20 gallon 24 x 36 in. (61.0 x 91.4 cm)<br>30 gallon 30 x 36 in. (76.2 x 91.4 cm)<br>*55 gallon 38 x 58 in. (96.5 x 147.3 cm)<br>* Available 50 per box |
| 3M™ Conductive Film, Short Rolls 1704, 1706, 1708 |                                                                                                                                                                                                 |
| Type                                              | Conductive                                                                                                                                                                                      |
| Film Thickness for 1704                           | 4.0 mil (102 microns)                                                                                                                                                                           |
| Film Thickness for 1706                           | 6.0 mil (152.4 microns)                                                                                                                                                                         |
| Film Thickness for 1708                           | 8.0 mil (203.2 microns)                                                                                                                                                                         |
| Standard Sizes                                    |                                                                                                                                                                                                 |
| Roll Length 150 ft. (45.7 m)                      | 36 in. (91.4 cm)<br>54 in. (137.2 cm)<br>72 in. (182.9 cm)                                                                                                                                      |
| 3M™ Conductive Film, Long Rolls, 1764             |                                                                                                                                                                                                 |
| Type                                              | Conductive                                                                                                                                                                                      |
| Film Thickness                                    | 4.0 mil (102 microns)                                                                                                                                                                           |
| Standard Size                                     |                                                                                                                                                                                                 |
| Roll Length 1,500 ft. (457.2 m)                   | 36 in. (91.4 cm)                                                                                                                                                                                |

| Part Numbers and Sizes          | Typical Value                           |                     |
|---------------------------------|-----------------------------------------|---------------------|
| 3M™ Conductive Tubing 1724      |                                         |                     |
| Type                            | Lay Flat Conductive Tubing              |                     |
| Film Thickness                  | 4.0 mil (102 microns)                   |                     |
| Standard Sizes                  |                                         |                     |
| Roll Length 500 ft. (152.4)     | 5 in. W (12.7 cm)<br>12 in. W (30.5 cm) |                     |
| Specifications                  |                                         |                     |
| Property                        | Test Method                             | Typical Value       |
| Thickness                       | ASTM D2103                              | 4 mil (102 microns) |
| Strength                        |                                         |                     |
| Breaking Factor                 | ASTM D882                               | 8 lbs./in.          |
| Puncture                        | Fed Std 101                             | 7 lbs.              |
| Heat Seal Parameters            |                                         |                     |
| Temperature                     |                                         | 250°F               |
| Time                            |                                         | 3.0-5.0 sec.        |
| Pressure                        |                                         | 20-60 PSI           |
| Vicat Softening Temperature     | ASTM D1525                              | 83°C                |
| Electrical Properties           |                                         |                     |
| Volume Resistivity              | ASTM D991                               | <500 ohm-cm         |
| Static Decay                    | EIA-541                                 | <2 sec.             |
| Chemical Susceptibility         |                                         |                     |
| Dilute Acids and Alkalies       | ASTM D543                               | Resistant           |
| Alcohols (Isopropanol)          |                                         | Resistant           |
| Hydrocarbons (Acetone)          |                                         | Moderate attack     |
| Ketones (Acetone)               |                                         | Slight attack       |
| Gasoline                        |                                         | Moderate attack     |
| Aromatic Hydrocarbons (Toluene) |                                         | Severe attack       |

\*Physical characteristics will change with other thicknesses.



# Product Data Sheet

## 3M™ Conductive Film Products

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- Техническую поддержку проекта.
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