

## MOISTURE BARRIER BAGS

20-08x-xxxx, 20-211-xxxx, 20-07x-xxxx

Standard compliance:

IEC 61340-5-1  
2011/65/EU (RoHS)  
IPC/JEDEC J-STD-033  
EIA-583, EIA-541, EIA-625

Heat sealable, electrostatic protective, moisture protective for ESD safe packaging

### Film construction 20-08x-xxxx :

|                                  |
|----------------------------------|
| Static dissipative coating       |
| Vacuum-metalized polyester layer |
| Vacuum-metalized polyester layer |
| Polyethylene layer               |
| Static dissipative coating       |

### Film construction 20-211-xxxx :

|                            |
|----------------------------|
| Static dissipative coating |
| Polyester                  |
| Aluminium foil             |
| Nylon                      |
| Polyethylene layer         |
| Static dissipative coating |

### Film construction 20-07x-xxxx :

|                            |
|----------------------------|
| Static dissipative coating |
| Nylon                      |
| Aluminium foil             |
| Polyethylene layer         |
| Static dissipative coating |

|                           | Material and features<br>20-08x-xxxx 90μ                   | Material and features<br>20-211-xxxx 106μ                  | Material and features<br>20-07x-xxxx 152μ                  |
|---------------------------|------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| <b>Thickness</b>          | 90μm (3.6 mil. Inch) +/- 10%                               | 106μ (4.0 mil. Inch) +/- 10%                               | 152μ (6.0 mil. Inch) +/- 10%                               |
| <b>Tensile strength</b>   | MD > 7000 psi / TD > 7000 psi<br>(ASTM D-882-91, method A) | MD > 7000 psi / TD > 7000 psi<br>(ASTM D-882-91, method A) | MD > 4000 psi / TD > 4300 psi<br>(ASTM D-882-91, method A) |
| <b>Tear strength</b>      | MD > 2.4 lbs / TD > 2.7 lbs<br>(ASTM-D-1004-94)            | MD ≥ 3.0 lbs / TD ≥ 4.0 lbs<br>(ASTM-D-1004-94)            | MD > 4 lbs / TD > 4.0 lbs<br>(ASTM-D-1004-94)              |
| <b>Puncture strength</b>  | ≥ 20 lbs<br>(FTMS 101C, Method 2065.1)                     | ≥ 25 lbs<br>(FTMS 101C, Method 2065.1)                     | ≥ 19 lbs<br>(FTMS 101C, Method 2065.1)                     |
| <b>MVTR</b>               | < 0.02 gram/100 in <sup>2</sup> / 24H<br>(ASTM-F1249)      | ≤ 0.0003 gram/100 in <sup>2</sup> / 24H<br>(ASTM-F1249)    | < 0.0003 gram/100 in <sup>2</sup> / 24H<br>(ASTM-F1249)    |
| <b>Heat seal strength</b> | ≥ 14 lbs/inch width (ASTM D-882-91)                        | ≥ 16 lbs/inch (ASTM D-882-91)                              | ≥ 16 lbs/inch (ASTM D-882-91)                              |
| <b>Heat sealable</b>      | 250/375°F; 0.8 to 3.5 sec.<br>30 to 70 psi                 | 250/375°F; 0.5 to 3.5 sec.<br>30 to 70 psi                 | 250/375°F; 0.8 to 3.5 sec.<br>30 to 70 psi                 |

|                                                    | Electrical properties<br>20-08x-xxxx 90μ                     | Electrical properties<br>20-211-xxxx 106μ                    | Electrical properties<br>20-07x-xxxx 152μ                  |
|----------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------|
| <b>Surface resistance<br/>(both surface)</b>       | 10e <sup>5</sup> ≤ RS < 10e <sup>11</sup> Ω<br>IEC 61340-5-1 | 10e <sup>5</sup> ≤ RS < 10e <sup>11</sup> Ω<br>IEC 61340-5-1 | 10e <sup>5</sup> ≤ RS < 10e <sup>11</sup> Ω<br>EC 1340-5-1 |
| <b>Electro Static shielding</b>                    | < 20nJ (ESD S11.31)                                          | < 20nJ (ESD S11.31)                                          | < 20nJ (ESD S11.31)                                        |
| <b>Warranty period and<br/>Storage conditions*</b> | 3 years (environment ≤ 30C/60%RH)                            |                                                              |                                                            |

### Bag specifications:

All bags dimensions are internal dimensions. The 1st dimension is the opening, the 2nd is the height.

Dimensions: from 20x30mm to 1000x1500mm  
Seal sizes: ≤ 12mm  
Max Opening (useful dimensions, out of weld): 980mm

**Options:** Customized sizes & customized printing on request.

