

ESD film foil

9800 ESD film is a transparent, static dissipative, self-adhesive polyester film. It includes a special coating on one side and a release film on the other side. The film can be applied to flat, insulating surfaces.

Advantages

- High tear strength, clear, adhesive-backed polyester film
- Permanently electrostatic-dissipative coating
- Complies with EN 61340-5-1
- Humidity independent
- Very low tribocharge generation and excellent electrostatic decay performance
- High clarity, good chemical and abrasion resistance
- Ideal for PCB manufacturing and testing
- Suitable for clean manufacturing applications (retrofitting cleanroom windows, etc.)
- Can be used as transparency for copies
- Thickness: 0.1 mm
- Maximum sheet/roll width: 1220 mm



ESD foil on roll

Typical physical properties

| Property | Test method | Unit | (100 microns) |
|-------------------------------|-------------|----------------|---------------|
| Tensile strength | | | |
| MD | ASTM D-882A | PSI | 25,000 |
| TD | ASTM D-882A | PSI | 35,000 |
| Yield strength | | | |
| MD | ASTM D-882A | PSI | 14,000 |
| TD | | | 14,000 |
| Elongation at break | | | |
| MD | ASTM D-882A | % | 200 |
| TD | | | 120 |
| Pencil hardness | | | |
| Hardness | ASTM D-3363 | Hardness scale | 3H |
| Optical | | | |
| Transmittance - Total visible | | | 85 |
| Transmittance - Total UV | | | 10 |
| Haze | | | 7.3 |

MD = Machine Direction | TD - Transversal Direction

Electrical properties

| Property | Test standard | Typical value | Requirements |
|---------------------------------|---------------|----------------------|--|
| Surface resistance R_s | EN 61340-2-3 | $10^6 - 10^8 \Omega$ | $1 \times 10^4 R_p$ $1 \times 10^{10} \Omega$ EN 61340-5-1 |
| Point to point resistance R_p | | | |

Chemical resistance

Samples were immersed in the specified chemicals for 24 hours at room temperature and then examined visually.

| Chemical | Surface damage | Visual evaluation |
|--------------------|----------------|-------------------|
| Deionized water | None | Clear |
| 30% Sulphuric acid | None | Clear |
| 30% Nitric acid | None | Clear |
| 30% HCL | None | Clear |
| Methanol | None | Clear |
| Ethanol | None | Clear |
| Isopropyl alcohol | None | Clear |
| Acetone | None | Slight change |
| Methylene chloride | None | Clear |

ESD film foil

Applying the film - step by step



Applying the film

Step 1

- Measure the usable area
- Cut the foil to size, adding 2 cm on each side (the extra will be cut off afterwards)

Step 2

- Moisten the surface to which the foil will be applied with water from a spray bottle. The surface should be wet during the entire application process.

Step 3

- Stick a piece of adhesive tape on one edge of the foil to easily pull off the transparent protection film.
- Moisten the adhesive on the foil with the spray bottle.

Step 4

- Carefully apply the wet, sticky side of the foil to the wet surface. It is important that both sides are moist.
- Smooth the film carefully to avoid creases or bubbles.

NEW Micro Suction Silicone adhesive

For easy manual application of the foil we have developed a new Micro Suction Silicone adhesive. This adhesive has a number of advantages that make the film easy to position. Our advise is to use standard adhesive only for laminating machines or very very experienced people, else use this new Micro Suction Silicone Adhesive

Benefits

- Reusable / Repositionable
- Never attach permanently
- Easy to apply by hand, less bubbly

Please note : ESD foil with Micro Suction Silicone adhesive has a thickness of 230 micron / 0.23 mm.

Please note: in exceptional cases, the top layer can be affected by acids, for example from the human skin. To protect the conductive layer, you can apply a transparent film or use the adhesive side on top.

Small optical defects are allowed in this product. If you require a product that is absolutely free from optical defects, please contact us for the "superior selected quality". Due to the extreme caution needed to produce these products, they can be several times more expensive.

| Series | Adhesive | Width (mm) | Length (mm) |
|--------|--|---|----------------------------------|
| 9800 | Select an option: STD : Standard adhesive SUC : NEW Micro Suction Silicone adhesive | Width of the visible area in mm. Max. width 1220 mm | Length of the visible area in mm |

Produkt anfragen