THERMO TECNO MANAGEMENT

ANTISTATIC PERFORMANCE: ISOLPAK® ALU and ISOLPAK® CLAD

Antistatic performance:
Please note that we have never made an independent test about electrostatic charging of ISOLPAK ALU and CLAD 7-Layer. Therefore we don't promote this product actively for the use in ex-protected areas. Nevertheless we hope that the following information will help you:

1. **Exposed film (first layer):**

   The exposed layer is a 20µm thermoplastic film which has the following electrostatic properties:

   Breakdown Voltage:
   Approx. 6,5 kV to DIN 40634 or VDE 0345 at 23°C and 50Hz

   Volume Resistivity:
   > 10^{17}Ω x cm to DIN 40634 or VDE 0345 at 23°C, DC
   Surface Resistivity:
   > 5 x 10^{14}Ωto DIN 53482 or VDE 0303/3 at 23°C and 25% RH
   > 5 x 10^{14}Ωto DIN 53482 or VDE 0303/3 at 23°C and 50% RH
   > 10^{11}Ωto DIN 53482 or VDE 0303/3 at 150°C and 75% RH

   Permittivity:
   3,3 to DIN 40634 or VDE 0345 at 23°C and 50 Hz
   3,3 to DIN 40634 or VDE 0345 at 23°C and 1 kHz
   3,2 to DIN 40634 or VDE 0345 at 23°C and 1 MHz
   2,9 to DIN 40634 or VDE 0345 at 23°C and 240 MHz
   2,9 to DIN 40634 or VDE 0345 at 23°C and 9300 MHz
   3,6 to DIN 40634 or VDE 0345 at 150°C and 50 Hz

2. **Backing of the exposed film (second layer):**

   Underneath the exposed film there is a 10µm Alu foil which is an electric conductor. This conductor is in direct contact with the exposed film and can discharge possible electrostatic charging.

3. **Practical experience:**

   In the past 20 years more than 10 million m² of similar products have been installed and we are not aware of any single problem with electrostatic charging.