

Materials for Electrical Static Control

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One of the major uses for engineering plastics is as an “insulating” material in many applications. However, most of these materials are limited in their ability to control electrostatic charges and discharges. To overcome this problem, specialty conductive additives have been developed and are compounded with many thermoplastics to achieve surface resistivity (‘OHMS”) values ranging from “anti-static, “conductive”, dissipative to EMI shielding. Many of the widely used engineering grade plastics are available in one or more of these “ESD” ranges.

These include ABS, acetal, nylons, polyethylene, polypropylene, polycarbonate, PBT, PET, PPSU, PES, PEEK and other materials.

“ESD” Polycarbonate Data

Tensile Strength:	5,000
OHMS Resistivity:	10/9th - 10/11th
Continuous Service Temperature:	150F
Elongation % at Break:	5
Comparative Cost:	High