

ABS-ESD7

ABS-ESD7™ (acrylonitrile butadiene styrene-electrostatic dissipative) is an ABS thermoplastic with static dissipative properties for applications where a static charge can damage products, impair their performance or cause an explosion.

ABS-ESD7 prevents a buildup of static electricity, so it will not produce a static shock or cause other materials like powders, dust and fine particles to stick to it. Ideal for electronic products with circuit boards and for the transportation and industrial equipment industries.

Most widely used to create jigs and fixtures for the assembly of electronic components, but it is also useful for building functional prototypes of fuel storage and delivery products, as well as cases, enclosures and packaging.

Mechanical Properties	Test Method	Metric
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	36 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	2,400 MPa
Tensile Elongation at Break (Type 1, 0.125", 0.2"/min)	ASTM D638	3%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	61 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	2,400 MPa
IZOD, nothed (Method A, 23°C)	ASTM D256	28 J/m
IZOD un-notched, Method A, 23°C)	ASTM D256	55 J/m

Thermal Properties	Test Method	Metric
Heat Deflection (HDT) @ 66 psi, 0.125" unannealed	ASTM D648	96°C
Heat Deflection (HDT) @ 264 psi, 0.125" unannealed	ASTM D648	82°C
Vicat Softening Temperature (Rate B/50)	ASTM D1525	99°C
Glass Transition (Tg)	DSC (SSYS)	108°C
Coefficient of Thermal Expansion (flow)	ASTM E831	8.82 ⁻⁰⁵ mm/mm/°C
Coefficient of Thermal Expansion (xflow)	ASTM E831	8.46 ⁻⁰⁵ mm/mm/°C
Melting Point	Not Applicable	Not Applicable