

ABS-ESD

STANDARD PLASTICS FOR FDM 3D PRINTING



MATERIAL NAME

ABS-ESD

COLOR

Black

PROCESS

FDM

PRODUCT DESCRIPTION

ABS-ESD is an anti-static ABS material, suitable for jigs, fixtures, turnover trays, equipment casings and functional prototypes that require static dissipation capabilities in the electronic and electrical industry.

TYPICAL APPLICATIONS

- Functional prototype testing
- End-use plastic parts
- ESD tooling/equipment

PRODUCT SAFETY

Thermoplastic printed parts should be handled according to normal workshop safety practices. Avoid high heat, open flames, and inhalation of fumes generated during post-processing or overheating.

PRODUCT DELIVERY & WAREHOUSING

- STORAGE**
Store parts in a dry, cool, and clean environment away from direct sunlight and high heat. Keep the material sealed before processing.
- TRANSPORTATION**
Pack parts securely to prevent warping, scratching, and impact. Protect from moisture and temperature swings during transit.

PROPERTIES OF PRINTED MATERIAL

Properties	Test Method	Value
Density (g/cm3)	ISO 1183	0.97 g/cm3
Water Absorption (%)	ISO 62	0.2%
Tensile strength (MPa)	ISO 527	XY: 38±2 Z: 22±5 MPa
Elongation at break	ISO 527	XY: 4.8±2.5 Z: 3.1±1.5%
Flexural strength (MPa)	ISO 178	XY: 63±2.1 Z: 35.9±3 MPa
Flexural modulus (MPa)	ISO 178	XY: 2263±100 Z: 1677±64 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 96 deg C
Impact strength notched	ISO 180	XY: 19.29 Z: 2.1 KJ/m²; ISO 180 (Izod)

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>