

PC-ABS

COMPOSITES FOR FDM 3D PRINTING



MATERIAL NAME

PC-ABS

COLOR

White

PROCESS

FDM

PRODUCT DESCRIPTION

PC-ABS is an alloy material of polycarbonate and ABS, which combines the strength and heat resistance of PC with the toughness and processability of ABS, as well as high heat resistance and high toughness. Suitable for automotive interior and exterior decoration, electronic equipment housings, industrial functional prototypes and medium-strength terminal plastic parts.

TYPICAL APPLICATIONS

- Functional prototype testing
- End-use plastic parts
- Assembly testing
- Mounting brackets

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	1.08 g/cm3
Water Absorption (%)	ISO 62	0.2~0.5%
Hardness	ISO 868	Shore D 80
Tensile strength (MPa)	ISO 527	38±3 MPa
Elongation at break	ISO 527	8±2%
Flexural strength (MPa)	ISO 178	70±3 MPa
Flexural modulus (MPa)	ISO 178	2300±200 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 102±2 deg C
Impact strength notched	ISO 180	15±3 KJ/m²; ISO 180 (Izod)

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