

PC-ABS

PC-ABS is an incredibly strong filament with an even higher impact resistance than our regular ABS. This is a consequence of the addition of the proper amount of polycarbonate in this modification, which also creates a nearly perfect interlayer adhesion and a beautiful surface gloss. The above features, combined with a highly stable printing process makes PC-ABS the perfect material for mechanical parts and tools, which should be light and strong and show minimal wear after prolonged use.

Features:

- Improved interlayer adhesion
- High impact resistance
- High surface gloss
- Stable printing process



Colours:

PC-ABS is available from stock in black & white. For other colours a minimum of 40 kg \pm 10% is required.



Packaging:

PC-ABS is available in nearly any type of packaging and labelling. Ask our team to help you customizing your product.

Additional info:

Recommended temperature for heated bed is +100°C. We recommend kapton and / or pva glue stick for adhesion. PC-ABS can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.

Dimensions

| Size | Ø tolerance | roundness |
|--------|--------------|------------|
| 1,75mm | \pm 0,05mm | \geq 95% |
| 2,85mm | \pm 0,10mm | \geq 95% |

Physical properties

| Description | Testmethod | Typical value |
|----------------------------------|------------|----------------------|
| Specific gravity | ASTM D792 | 1,05 g/cc |
| MFR 220°C/10kg | ASTM D1238 | 7,0 g/10 min |
| Tensile strength | ASTM D638 | 46 Mpa |
| Strain at break | ASTM D638 | 13% |
| Tensile modulus | ASTM D638 | 2100 Mpa |
| Impact strength Izod method 23°C | ISO 180/A | 40 KJ/m ² |

Thermal Properties

| Description | Testmethod | Typical value |
|-----------------------|------------|------------------|
| printing temp. | - | 245-275°C |
| mellting temp. | ISO 294 | 250°C \pm 10°C |
| Heat Deflection Temp. | ISO 306 | \pm 108°C |