

Tough 65C Black

Production Rigid

Excellent for long-term use parts

Simulating Black ABS, the Tough 65C is notable for its high impact strength, tensile strength, and elongation at break.



Benefits

- Excellent long-term functionality and stability
- Quick build and finishing time
- High accuracy and repeatability

Applications

- Load-bearing parts such as handles, cranks, knobs, and levers.
- Structural parts like brackets, snap-fits, and custom fasteners
- Snap parts requiring detail and accuracy for consumer products, sporting goods, and general use
- Latching and board connectors for data devices and white goods
- Sensor holders and guides



Physical Properties

| | |
|--------|-------|
| Colour | Black |
| Type | ABS |

Mechanical Properties

| | | TEST/ISO |
|--------------------------------------|------------------------------|------------|
| Solid Density | 1.22 g/cm³ | ASTM D792 |
| Tensile Strength (MPa) | 40 | ASTM D638 |
| Tensile Modulus (MPa) | 1700 | |
| Elongation at Break (%) | 35 | |
| Elongation at Yield (%) | 6.6 | |
| Flexural Strength (MPa) | 60 | ASTM D790 |
| Flexural Modulus (MPa) | 1600 | |
| Notched Izod Impact Strength (J/m) | 31 | ASTM D256 |
| Unnotched Izod Impact Strength (J/m) | 100 | ASTM D4812 |
| Heat Deflection Temperature (°C) | | ASTM D648 |
| @ 0.455 MPA | 70 | |
| @ 1.82 MPA | 51 | |
| Shore Hardness | 81 D | ASTM D2240 |
| 24hr Water Absorption (%) | 0.62 | ASTM D570 |

Electrical

| | | |
|----------------------------------|-----------------------------|-----------|
| Dielectric Strength (kV/mm) @3mm | 13 | ASTM D149 |
| Dielectric Constant @ 1MHz | 3.75 | ASTM D150 |
| Dissipation Factor @ 1MHz | 0.037 | |
| Volume Resistivity (ohm-cm) | 3.37x10¹⁵ | ASTM D257 |

Call: 028 9070 6940

Email: sales@laserproto.com

Web: www.laserproto.com

[Click here to request a quote](#)

Please be advised that all information provided in this document is representative of typical properties and as advised by the material manufacturer. Performance characteristics of these products may vary according to product application, operating conditions or with end use.

Laser Prototypes Ltd makes no warranties of any type, express or implied, with respect to any of the goods or services supplied. This includes but is not limited to any warranty of fitness for a particular purpose or of properties or of suitability for a specific application. Data are subject to change without notice as part of our continuous development and improvement processes.