

Technical Data Sheet



Product name: ABS Filament

Polymer name: **Acrylonitrile butadiene styrene**

Date of issue: August 2016

Version: v1

Our ABS filaments suits for FDM 3D-printers, ABS is one of the most commonly used thermoplastic materials in 3D printing. It has a high tensile strength, great impact resistance, heat resistant, and good overall toughness.

Filament specifications

| | | | | |
|-------------------|--------|----|-----------|------|
| Trade diameter | 1.75mm | | 1/16 inch | |
| physical diameter | 1.75 | mm | 0.069 | inch |
| tolerance | 0.05 | mm | 0.0019 | inch |
| Roundness | ≥ 95 | % | ≥ 95 | % |

Technical / Physical Specifications

| Property | Typical value | Unit | Test Method |
|----------------------------------|---------------|--------------------|-------------|
| <i>Physical & Mechanical</i> | | | |
| Impact strength | 23 | KJ/m ² | D 256 |
| Tensile strength | 455 | Kg/cm ² | D 638 |
| Tensile Elongation | 20 | % | D 638 |
| Flexural strength | 650 | Kg/cm ² | D 790 |
| Flexural modulus | 22000 | Kg/cm ² | D 790 |
| Rock well hardness | 109 | R-scale | D 785 |
| Specific gravity | 1.04 | g/cc | D 792 |
| <i>Thermal</i> | | | |
| Melting temperature | 230 | ° C | |
| Mold temperature | 60-80 | ° C | |
| Vicat softening temp | 95 | ° C | D 1525 |

Product details, certifications and compliance

HS Code: 39169090

RoHS

Notes

- The above values are measured on uncolored raw material. Actual material properties may differ depending on color additives.
- Properties may change depending on actual printer settings