



3D Printing Filament

TECHNICAL DATA SHEET ST-ABS

Commercial name: **Machines-3D**

Raw material: ABS – Acetylonitrile Butadiene Styrene

Designation: 3D printing applications

Material specifications

| Property | Value | Test Method - ISO |
|-----------------------------|------------------------|-------------------|
| Density | 1,05 g/cm ³ | 1183B |
| Vicat Softening Temperature | 102°C | 306/B50 |
| Tensile Modulus | 2150 MPa | 527-2 |
| Tensile Stress | 43 MPa | 527-2/50 |
| Flextural Modulus | 2100 MPa | 178 |
| Flextural Stress | 70 MPa | 178 |

Filament specifications

| Property | Value and Tolerances |
|-----------------------------------------|----------------------|
| Diameter 1.75mm | 1.75 ± 0.05 mm |
| Diameter 2.85mm | 2.85 ± 0.05 mm |
| Roundness deviation | max 3% |
| Suggested print temperature (guideline) | 240 – 250°C |
| Suggested print speed | 40 – 80 mm/s |
| Suggested bed temperature | 90-110°C |