

FIL-A-GEHR ABS®

Filaments for professional 3D printing

Technical Data

Melt volume rate ISO 113, 220 °C/10kg	31 cm ³ / 10 min
Notched Impact Strength (Izod) ISO 180/A	15 kJ / m ²
Notched Impact Strength (Charpy) ISO 179	15 kJ / m ²
Tensile Stress at Yield ISO 527	46 MPa
Tensile Modulus ISO 527	2400 MPa
Hardness, Ball Indentation ISO 2039-1	105 MPa
HDT A ISO 75	94 °C
Density ISO 21183	1050 kg / m ³
Melt Temperature Range ISO 294	230 - 260 °C



Technical Guidelines

Optimal Nozzle Temperature	245 °C
Bed Temperature	110 °C

Tensile Test ISO 527, Interlayer Adhesion

Material	Orientation of test specimen (tensile bar) in build chamber	Tensile Strength	Tensile Modulus
FIL-A-GEHR ABS natural	xy-direction	23,3 MPa	1266 MPa
FIL-A-GEHR ABS natural	z-direction	20,5 MPa	1733 MPa
FIL-A-GEHR ABS black	z-direction	24,5 MPa	1883 MPa

To determine the FIL-A-GEHR ABS® data, ISO 527 tensile test specimen were printed with the following parameters: Infill 20 %, T_{Print} 245 °C, T_{Bed} 110 °C, Layer thickness 0,2 mm, Outlines 3, Nozzle diameter 0,5 mm, wall thickness 1,5 mm, Infill rectilinear, Printing speed 50 mm/s, Multiplier 100, Slicer Simplify3D