

**Product Texts**

To determine the FIL-A-GEHR ABS® data, ISO 527 tensile test specimen were printed with the following parameters: Infill 20%, T<sub>Print</sub> 245°C, T<sub>Bed</sub> 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

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	31 <sup>[1]</sup>	cm <sup>3</sup> /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

1: Data based on raw material

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2400 <sup>[2]</sup>	MPa	ISO 527
Yield stress	46 <sup>[2]</sup>	MPa	ISO 527
Charpy notched impact strength, +23°C	15 <sup>[2]</sup>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	15 <sup>[2]</sup>	kJ/m <sup>2</sup>	ISO 180/1A
Ball indentation hardness	105 <sup>[2]</sup>	MPa	ISO 2039-1

2: Data based on raw material

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	245 <sup>[3]</sup>	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	94 <sup>[3]</sup>	°C	ISO 75-1/-2

3: Data based on raw material

Other properties	Value	Unit	Test Standard
Density	1050 <sup>[4]</sup>	kg/m <sup>3</sup>	ISO 1183

4: Data based on raw material

3D Data	Value	Unit	Test Standard
Tensile modulus, flat	1270 <sup>[5]</sup>	MPa	-
Tensile modulus, upright	1730 <sup>[5]</sup>	MPa	-
Tensile strength, flat	23.3 <sup>[5]</sup>	MPa	-
Tensile strength, upright	20.5 <sup>[5]</sup>	MPa	-

5: natural color

**Characteristics**

**Processing**

Additive Manufacturing

**Certifications**

Food contact

**Delivery form**

Monofilament

**Applications**

Medical

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Regional Availability**

Europe

**Features**

Good Adhesion, Low Odor