

Technical Data Sheet for Ultrasint® PP 1400 black

Version No.: 1.0, revised 10/2022

General Properties	Test Method	Typical Values
Bulk Density / kg/m <sup>3</sup>	DIN EN ISO 60	330
Printed Part Density / kg/m <sup>3</sup>	ISO 61	890
Mean Particle Size d50 / μm	Laser Diffraction	60 – 70
Melting Temperature / °C	ISO 11357 (10 K/min)	140
Crystallization Temperature / °C	ISO 11357 (10 K/min)	98
Melt Volume Flow Rate / cm <sup>3</sup> /10min	ISO 1133 (230 °C, 2.16 kg)	10

Thermal Properties	Test Method	Typical Values
HDT/A (1.8 MPa) / °C	ISO 75-2	62
HDT/B (0.45 MPa) / °C	ISO 75-2	102
Vicat/A (10 N) / °C	ISO 306	131
Vicat/B (50 N) / °C	ISO 306	90

Mechanical Properties	Test Method	Typical Values X-direction	Typical Values Z-direction
Tensile Strength / MPa	ISO 527-2 (23 °C)	29	29
Tensile Modulus / MPa	ISO 527-2 (23 °C)	1250	1300
Tensile Elongation at Break / %	ISO 527-2 (23 °C)	25	25
Tensile Strength / MPa	ISO 527-2 (80 °C)	12	11
Tensile Modulus / MPa	ISO 527-2 (80 °C)	300	300
Tensile Elongation at Break / %	ISO 527-2 (80 °C)	> 100	> 100
Flexural Modulus / MPa	DIN EN ISO 178	1350	1250
Charpy Impact Strength (notched) / kJ/m <sup>2</sup>	ISO 179-1	4	4
Charpy Impact Strength (unnotched) / kJ/m <sup>2</sup>	ISO 179-1	34	28
Izod Impact Strength (notched) / kJ/m <sup>2</sup>	ISO 180	4	4
Izod Impact Strength (unnotched) / kJ/m <sup>2</sup>	ISO 180	26	22

 Detailed material data and support for FEA simulations available on request ([sales@basf-3dps.com](mailto:sales@basf-3dps.com)).