



AN EOS COMPANY



Ultrasint® PA6 Black

NYLON 6

PA 6 from BASF is a tough and strong material affording parts with good damping characteristics and high shock resistance even in the dry state and at low temperatures.

HIGHLIGHTS

- Ultrasint PA6 black comes in solid black color
- Ultrasint PA6 comes in solid natural white color

APPLICATIONS

- Engine compartment parts
- Jigs & fixtures
- Fluid reservoirs
- Multi-purpose industrial goods



HEADQUARTERS

ALM - Advanced Laser Materials

3115 Lucius McCelvey, Temple, TX 76504

P: 1.254.773.3080

FAX: 1.254.773.3084

E: info@advancedlasermaterials.com

AdvancedLaserMaterials.com

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TYPICAL PHYSICAL PROPERTIES		
PROPERTY	TEST METHOD	TYPICAL VALUES
Bulk Density / kg/m ³	DIN EN ISO 60	490
Printed Part Density / kg/m ³	DIN EN ISO 1181-1	1150
Mean particle size d50 / μm	Laser Diffraction	65-75
Melting Temperature / °C	ISO 11357 (20 K/min)	220
Crystallization Temperature / °C	ISO 11357 (20 K/min)	174
Melt Volume Flow Rate / cm ³ /10min	ISO 1133 (240 °C, 2.16 kg)	24
HDT/A (1.8 MPa) / °C	ISO 75-2	98
HDT/B (0.45 MPa) / °C	ISO 75-2	194
Vicat/A (10 N) / °C	ISO 306	216
Vicat/B (50 N) / °C	ISO 306	199

TYPICAL PHYSICAL PROPERTIES					
PROPERTY	TEST METHOD	TYPICAL VALUES X-DIRECTIONS		TYPICAL VALUES Z-DIRECTIONS	
		Dry ¹	Cond. ²	Dry ¹	Cond. ²
Tensile Strength / MPa	ISO 527-2	61	54	47	43
Tensile Modulus / MPa	ISO 527-2	3500	1550	3550	1600
Tensile Elongation at break / %	ISO 527-2	1.9	51	1.4	6.0
Flexural Modulus / MPa	DIN EN ISO 178	3300	1550	3500	1650
Charpy Impact Strength (notched) / kJ/m ²	ISO 179-1	2.5	4.2	1.7	2.8
Charpy Impact Strength (unnotched) / kJ/m ²	ISO 179-1	7.1	12.6	4.1	6.5
Izod Impact Strength (notched) / kJ/m ²	ISO 180	3.7	5.4	2.6	2.9
Izod Impact Strength (unnotched) / kJm ²	ISO 180	7.0	11.5	4.5	6.5

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.