

Nylon 12 PA

General Properties			
Average grain size	Laser diffraction	60	µm
Bulk density	DIN 53466	0.435 - 0.445	g/cm ³
Density of laser-sintered part	EOS-Method	0.9 - 0.95	g/cm ³
Mechanical Properties			
Tensile modulus	DIN EN ISO 527	1700 ± 150	N/mm ²
Tensile strength	DIN EN ISO 527	45 ± 3	N/mm ²
Elongation at break	DIN EN ISO 527	20 ± 5	%
Flexural modulus	DIN EN ISO 178	1240 ± 130	N/mm ²
Charpy - Impact strength	DIN EN ISO 179	53 ± 3.8	kJ/m ²
Charpy - Notched impact strength	DIN EN ISO 179	4.8 ± 0.3	kJ/m ²
Izod - Impact strength	DIN EN ISO 180	32.8 ± 3.4	kJ/m ²
Izod - Notched impact strength	DIN EN ISO 180	4.4 ± 0.4	kJ/m ²
Ball indentation hardness	DIN EN ISO 2039	77.6 ± 2	-
Shore D Hardness	DIN 53505	75 ± 2	-
Thermal Properties			
Melting point	DIN 53736	172 - 180	°C
Vicat softening temperature B/50	DIN EN ISO 306	163	°C
Vicat softening temperature A/50	DIN EN ISO 306	181	°C

** The mechanical properties depend on the exposure parameters used. The data are based on our latest knowledge and are subject to changes without notice. They do not guarantee properties for a particular part and in a particular application.*