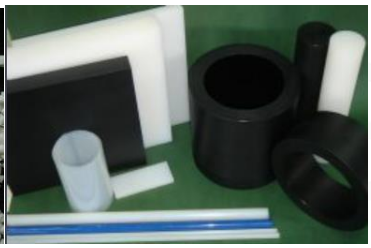
Xometry

Datasheet

PA6GB-SLS

Description

In demanding usage environments, ® PA6GB is the material of choice for advanced technological applications and one of the most commonly used engineering plastics in mass production. Additionally, Ultrasint® PA6GB boasts exceptional strength, hardness, medium sealing performance, as well as outstanding resistance to thermal deformation and thermal aging. Ultrasint® PA6GB redefines the application scope of PBF.



Features

Color: Natural

Features: High strength and hardness, excellent medium sealing performance, high heat deflection temperature, and outstanding thermal aging resistance

Typical applications: Engine compartment components, jigs and fixtures, pipes and media for storage components, liquid storage tanks, multi-purpose industrial products

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Parameters

General Properties	Test Method	Typical Value
Bulk density / kg/m³	DIN EN ISO 60	
Printed part density / g/cm³	ISO 61	1350
Average particle size d50/μm	Laser Diffraction	65-85
Melting temperature / °C	ISO 11357 (10 K/min)	220
Crystallization temperature / °C	ISO 11357 (10 K/min)	172
Volumetric flowrate of melt / cm³/10min	ISO 1133(220°C, 2.16kg)	

Thermal Properties	Test Method	Typical Value
Heat deflection temperature / A (1.8 MPa)/°C	ISO 75-2	134
Heat deflection temperature / B (0.45 MPa)/°C	ISO 75-2	207

Mechanical Properties	Test Method	Typical Value, X	Typical Value, Z
Tensile Strength / MPa	ISO 527-2	75.6	61.9
Tensile Modulus / MPa	ISO 527-2	7750	6350
Elongation at Break /	ISO 527-2	1.7	1.3

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Flexural Modulus / MPa	ISO 178	6390	5310
Flexural Strength / MPa	ISO 178	121	91.8
Izod Impact Strength (Notched) / kJ/m²	ISO 180	3	2
Izod Impact Strength (Unnotched) / kJ/m²	ISO 180	13	5.8