

OCEANZ PA11

Datasheet for polyamide parts produced by Selective Laser Sintering

PA11 is a bio-based whitish polyamide material. Compared to PA12 it offers a higher elongation at break, elasticity and impact resistance. Typical applications are therefore environments where high deformations occur. In addition, the material does not splinter when fractured.



Laser-sintered parts made from Oceanz PA11 possess excellent material properties:

- high elongation and impact resistance
- biocompatible according to EN ISO 10993-1

Typical applications are fully functional plastic parts of highest quality. Due to the excellent mechanical properties the material is often used to substitute typical injection molding plastics. The biocompatibility in combination with the high elasticity and impact strength allows its use for prosthetic and orthotic devices.

Oceanz PA11 is available for industrial and medical applications and can be polished, vapor polished and colored.

Part properties	Value	Unit
Part color	Natural white	-
Part density	0.97	g/cm ³
Minimum wall thickness	1.0	mm
Layer thickness	0.10	mm
Max. product size	192 x 240 x 315	mm
Tensile modulus XY / Z	1700 / 1800	MPa
Tensile strength XY / Z	48 / 40	MPa
Strain at break XY / Z	28 / 10	%
Charpy Impact strength (notched)	5.1 / 3.9	kJ/m ²
Izod Impact strength (notched)	6.5 / 4.8	kJ/m ²
Melting temperature	200	°C

Please note that all mentioned mechanical properties are optimum values according to manufacturer. Due to the layer by layer production process and the specific design of each individual product values may differ. ***If specific properties and/or dimensions are critical, always contact us so we can inform you how to obtain required specifications!***

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Revision date: July 2026