

ALUMIDE

Material Data Sheet

Material Properties*:

Average grain size	Laser diffraction	60	μm
Bulk density	DIN 53466	0.64 ± 0.04	g/cm ³
Density of laser-sintered part	EOS-Method	1.36 ± 0.05	g/cm ³

Mechanical Properties:

Tensile Modulus	DIN EN ISO 527	3800 ± 150	N/mm ²
Tensile strength	DIN EN ISO 527	46 ± 3	N/mm ²
Elongation at break	DIN EN ISO 527	3.5 ± 1	%
Flexural Modulus	DIN EN ISO 178	3000 ± 150	N/mm ²
Flexural strength	DIN EN ISO 178	74 ± 2	N/mm ²
Charpy - Impact strength	DIN EN ISO 179	29 ± 2	kJ/m ²
Charpy - Notched Impact strength	DIN EN ISO 179	4.6 ± 0.3	kJ/m ²
Shore D - hardness	DIN 53505	76 ± 2	

Thermal Properties:

Melting point	DIN 53736	172 - 180	°C
Heat Deflection Temperature	ASTMD648(0.45 Mpa)	177.1	°C
Vicat softening temperature B/50	DIN EN ISO 306	169	°C
Heat Conductivity (170 °C)	Hot wire method	0.5 - 0.8	W(mK) ⁻¹

* The mechanical properties depend on the x-, y-, z-position and 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.