## ALUMIDE

## Datasheet for aluminium filled polyamide parts produced by Selective Laser Sintering



Material Alumide is a metallic grey, aluminium filled polyamide 12 powder, which is characterised by its high stiffness, metallic appearance and good postprocessing abilities. Laser sintered alumide parts are characterised by:

- High dimensional accuracy
- Increased thermal conductivity
- Good machinability

The surfaces of alumide parts can easily be grinded, polished or coated. The machining of alumide parts is simplified through the cut breaking effect of the aluminium filling. Typical applications for alumide are the manufacturing of stiff parts with metallic appearance in automotive industry, tool inserts for injection moulding of small production runs, or illustrative models with a metallic appearance.

Alumide is processed in ISO9001 environment and can be coloured, polished and coated.

Part properties	Value	Unit
Part colour	Metallic grey	-
Part density	1.20	g/cm <sup>3</sup>
Minimum wall thickness	1.5	mm
Layer thickness	0.10	mm
Max. product size	192 x 240 x 315	mm
Tensile modulus XY	3800	MPa
Tensile strength XY	48	MPa
Strain at break XY	4	%
Shore hardness	76	Shore D
Melting temperature	172-180	°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!*