



## Data Sheet

# Alumide® / Nylon 12 (PA 12) filled with aluminium

## Alternative Designations

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## Key Features

High rigidity • High dimensional accuracy • High thermal conductivity • Machinability

## Description

It is a metallic grey polyamide powder filled with aluminium. This combination makes the material strong and durable, while still being lightweight. Nylon 12 is often used in 3D printing applications because it can create strong, detailed parts. When filled with aluminium, the material is also conductive, making it ideal for creating electrical components or printed circuit boards.

## Mechanical Properties

Tensile modulus	3800 MPa
Tensile strength	48 MPa
Elongation at break	4%
Hardness (Shore D)	76

## Thermal Properties

Melting temperature (20°C/min)	176°C
Heat deflection temperature (1.80 MPa)	144°C
Heat deflection temperature (1.80 MPa)	175°C

## Physical Properties

Density	1.360 g/cm <sup>3</sup>
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## Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://Materialdatacenter.com) for further information on this material.