

Alumide® / Nylon 12 (PA12) filled with aluminium

Key Features

Stiffness • High accuracy • Heat resistance • strength

Applications

Prototyping • Tooling • Electronics • Engineering • Consumer goods

Product Description

Alumide® is a metallic gray, aluminum-filled polyamide 12 powder renowned for its high rigidity, metallic appearance, and versatile post-processing options. Parts made from Alumide® exhibit excellent dimensional stability at high temperatures, making them suitable for functional applications in elevated heat environments. Its surfaces can be easily finished through grinding, polishing, or coating, while the chip-breaking effect of the aluminum filling simplifies machining processes.

Properties

| | |
|--|-------------------------------------|
| Tensile modulus | 3,800 MPa |
| Tensile strength | 48 MPa |
| Elongation at break | 4% |
| Flexural strength | 3,600 MPa |
| Melting temperature (20°C/min) | 176°C |
| Heat deflection temperature (0.45 MPa) | 175°C |
| Heat deflection temperature (1.80 MPa) | 144°C |
| Softening temperature | 169°C |
| Density | 1.36 g/cm ³ |
| Hardness | 76D |
| Flame retardancy | Flammability 1 mm JAR/FAR/CS 25.853 |

Reference

For more detailed source information, please consult the original document linked [here](#). We encourage users to verify the data's relevance and suitability for their specific needs.

