

Data Sheet

Nylon 12 flame retardant / PA 2241 FR

Alternative Designations

Key Features

Flame retardant • Resistance to chemicals • Thermal stability • High reuseability

Description

This polyamide-12-based material contains a halogen flame retardant. It has excellent resistance to chemicals with long-term stability. It is manufactured using Selective laser sintering with good tensile strength and elasticity. PA 2241 FR is ideal for aeronautics and aerospace applications such as ventilation ducts, and exhaust valves in aircraft.

Mechanical Properties

Thermal Properties

Tensile modulus	1600 – 1900 MPa
Tensile strength	41 – 49 MPa
Elongation at break	6 – 22%
Hardness (Shore D)	89

Melting temperature (20°C/min)	185°C
Heat deflection temperature (1.80 MPa)	84°C
Heat deflection temperature (0.45 MPa)	154°C

Physical Properties

Density	1 g/cm³

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit <u>Materialdatacenter.com</u> for further information on this material.