

# Nylon 12 flame retardant / PA 2241 FR

## Key Features

Flame retardancy • Chemical resistance • Thermal stability

## Applications

End-use parts • Aerospace

## Product Description

PA 2241 FR is a white polyamide 12 powder designed for laser sintering systems, incorporating a halogen-based flame retardant. Its recyclability offers exceptional cost-efficiency compared to other flame-retardant materials. Additively manufactured parts exhibit excellent tensile strength, making them ideal for aircraft interior applications such as ventilation ducts and exhaust valves.

## Properties

Tensile modulus (for dry state)	1,900 MPa
Tensile strength (X/Y, Z) (for dry state)	49, 46 MPa
Elongation at break (X/Y, Z) (for dry state)	15, 6%
Melting temperature (20°C/min)	185°C
Heat deflection temperature (0.45 MPa)	154°C
Heat deflection temperature (1.80 MPa)	84°C
Density	1.00 g/cm <sup>3</sup>
Hardness	89 HRB
Flame retardancy	Flammability 1 mm JAR/FAR/CS 25.853

## Reference

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

