



Material Data Sheet: **Nylon 12 (PA 2210 FR)**

Properties: Flame retardant Nylon 12 with whitener

Typical Properties: **Mechanical Properties**

General material properties

Bulk density	DIN 53466	0.52	g/cm ³
Density of laser-sintered part	EOS-method	1.05 ± 0.05	g/cm ³

Mechanical properties

Tensile modulus	DIN EN ISO 527	2250 ± 150	MPa
Tensile strength	DIN EN ISO 527	45 ± 3	MPa
Elongation at break	DIN EN ISO 527	5.0 ± 1	%
Flexural modulus	DIN EN ISO 178	1750 ± 100	MPa
Flexural strength	DIN EN ISO 178	45 ± 2	MPa

Thermal properties

Melting point	DIN 53736	172 – 180	°C
---------------	-----------	-----------	----

Burning behaviour

Flammability for parts in devices and appliances	UL 94 / HB	1.1	mm
	UL 94 / V-0	2.0	mm
Flammability properties (Aircraft)	FAR 25.853 b(4)	1.5 / 2.0	mm
	ABD 0031 / AITM 2.0002	1.5 / 2.0	mm
	BSS 7230 F2	0.06 / 0.08	inches
Smoke generation (Aircraft)	FAR 25.853 (d), Appendix F - Part V	1.5 / 2.0	mm
	ABD 0031 / AITM 2.0007	1.5 / 2.0	mm
	BSS 7238	0.06 / 0.08	inches
Toxic gas generation (Aircraft)	ABD 0031 / AITM 3.0005	1.5 / 2.0	mm
	BSS 7239	0.06 / 0.08	inches

Conversion of units: 1.0 mm is equivalent to 0.03937 inches