

Data Sheet: SLS-PA12 Flame Retardant

THERMAL PROPERTIES

Property	Unit	Value	Norm
Toxic gas generation	mm	1.0/1.5/2.0	ABD 0031 (Issue: F), method: AITM3.0005
Smoke generation	mm	1.0/1.5/2.0	ABD 0031 (Issue: F), method: AITM2.0007
Flammability properties	mm	1.0/1.5/2.0	CS 25 / JAR 25 / FAR 25 § 25-853 12s Ignition Time

MECHANICAL PROPERTIES

Property	Unit	Value	Norm
Tensile Strength ⁱ	MPa	45	ISO 527
Tensile Modulus ⁱ	MPa	1900	ISO 527
Elongation at Break ⁱ	%	10	ISO 527

PHYSICAL PROPERTIES

Property	Unit	Value	Norm
Density	g/cm ³	1.00	
UL Flammability		V0-Blue card	UL 94 V-0

CHEMICAL PROPERTIES

Property	Unit	Value
Halogen-free		No

TOLERANCES

Property	Unit	Value As Built
Achievable Part Accuracy ⁱⁱ	mm %	+/- 0.3 mm for parts up to 100 mm +/- 0.3 % for beyond 100 mm
Min. Wall Thickness	mm	1.0

MAKERVERSE

AVAILABLE FINISHES WITH PROPERTIES DEFINED IN THIS DATA SHEET

1 | STANDARD

As built and removing access material by blasting with air.

AVAILABLE FINISHES FOR SURFACE REQUIREMENTS

2 | SEALED

As built and removing access material by blasting with air including additional sealing to achieve air- and watertight geometries.

3 | SMOOTHED

As built and removing access material by blasting with air including additional chemical smoothing to achieve a homogeneous, smooth surface roughness.

4 | TUMBLED

As built and removing access material by blasting with air including mechanical tumbling to achieve a smoother surface roughness across all exposed surfaces of the part.

AVAILABLE FINISHES FOR COLOR REQUIREMENTS

5 | PAINTED

As built and removing access material by blasting with air including a color of choice applied to the part. Surfaces that require painting and the RAL color code should be specified on the technical drawing or in the comment field on the MakerVerse platform.

6 | COLOR DYED

As built and removing access material by blasting with air including additional dyeing by immersion in a warm color bath. The color penetration reaches a depth of about 0.5 mm and covers all surfaces.

AVAILABLE COMBINATIONS OF FINISHES

Many finishes can be combined or tuned to specific requirements. Please select "custom" in the "finish" dropdown on the MakerVerse platform and specify your requirements to request a quote for alternative finishing options.

MAXIMUM BUILD CHAMBER SIZE

700 mm x 380 mm x 580 mm

Warranty/Disclaimer: The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry. The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product.

ⁱ Depending on build direction

ⁱⁱ As a result of the part's geometry, strong tensions may cause distortion in the part which may lead to greater deviation.