

SELECTIVE LASER SINTERING

# PA12 VAPOUR SMOOTH WHITE

[Supplier Data Sheet: EOS PA 2200 Balance 1.0](#)



## PRODUCT DESCRIPTION

PA12 Vapour Smooth White is an economical material choice for functional prototypes and end-use parts. It offers high impact and temperature resistance, is very durable, and remains stable under a range of environmental conditions.

## APPLICATIONS

The material's high strength is ideal for jigs and fixtures, housings, and other functional parts. It also has a low coefficient of friction, making it suitable for many types of gears and bearings.

## KEY PRODUCT BENEFITS

- Strength and stiffness
- Well-balanced material properties

## PROPERTIES

PROPERTY	TEST METHOD	VALUE	
Colour	-	White (shiny)	
Sintered Density*	ASTM D792	0,93 g/cm <sup>3</sup>	
Surface Roughness**	DIN EN ISO 4287	Ra = 10-25 µm Rz = 60-140 µm	
Water absorption, 20 °C, 50% Relative Humidity	DIN EN ISO 62	0.5 ± 0.2%	
Water absorption, 24 hrs. in boiling water		2.0 ± 0.3%	
E-Module (x-y plane)	DIN EN ISO 527, test speed 10mm/min	2000 ± 200 MPa	
E-Module (z plane)		1900 ± 200 MPa	
Tensile strength (x-y plane)		50 ± 4 MPa	
Tensile strength (z plane)		42 ± 5 MPa	
Elongation at break (x-y plane)		11% ± 4%	
Elongation at break (z plane)		4% ± 2%	
Vicat Softening Point*		ISO 306 (50°C/h 50N)	163 °C

\*From supplier data sheet

\*\*Surface roughness may vary depending on orientation

## TOLERANCES

For well-designed parts, tolerances of ± 0.20mm plus 0.002mm/mm can typically be achieved. Note that tolerances may change depending on part geometry.

Version 1.0 | March 2023