## EOS PA 2200 Speed 1.0

Polyamide 12

## EOS GmbH

## Message:

This whitish fine powder PA 2200 on the basis of polyamide 12 serves with its very well-balanced property profile a wide variety of applications. Laser-sintered parts made from PA 2200 possess excellent material properties:

high strength and stiffness

good chemical resistance

excellent long-term constant behaviour

high selectivity and detail resolution

various finishing possibilities (e.g. metallisation, stove enamelling, vibratory grinding, tub colouring, bonding, powder coating, flocking) bio compatible according to EN ISO 10993-1 and USP/level VI/121 °C

approved for food contact in compliance with the EU Plastics Directive 2002/72/EC (exception: high alcoholic foodstuff)

Typical applications of the material are fully functional plastic parts of highest quality. Due to the excellent mechanical properties the material is often used to substitute typical injection moulding plastics. The biocompatibility allows its use e.g. for prostheses, the high abrasion resistance allows e.g. the realisation of movable part connections.

150 µm layer thickness:

The Speed parameter set applies the classic 150 µm layer thickness which is popular and widespread on the market due to its allround qualities. This parameter set offers slightly higher surface quality than TopSpeed.

General Information					
Features	Biocompatible Food Contact Acceptable				
	Good Abrasion Resistance				
	Good Chemical Resistance				
	High Stiffness				
	High Strength				
Uses	Engineering Parts				
	Medical/Healthcare Applications Prosthetics				
	Prototyping				
Agency Ratings	EU 2002/72/EC				
	ISO 10993				
	USP Class VI				
Appearance	White				
Forms	Powder				
Processing Method	3D Printing, Laser Sintering/Melting				
Physical	Nominal Value	Unit	Test Method		
Density	0.930	g/cm³	Internal Method		
Thickness - Layer	150.0	μm			
Hardness	Nominal Value	Unit	Test Method		
Shore Hardness (Shore D, 15 sec)	75		ISO 868		

Tensile Modulus        1       1600       MPa       ISO 527-2        2       1550       MPa       ISO 527-2         Tensile Stress	Mechanical	Nominal Value	Unit	Test Method
<sup>2</sup> 1550         MPa         ISO 527-2           Tensile Stress <sup>3</sup> 42.0         MPa         ISO 527-2          4         48.0         MPa         ISO 527-2          4         48.0         MPa         ISO 527-2           Tensile Strain				
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2.Z Direction3.Z Direction4.Y Direction	NOTE			
3.     Z Direction       4.     Y Direction	1.	X Direction		
4. Y Direction	2.	Z Direction		
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S. A Direction	5.	X Direction		
6. Z Direction	6.	Z Direction		
7. X Direction	7.	X Direction		
8. X Direction	8.	X Direction		
9. X Direction	9.	X Direction		

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