

## Material data sheet

### PA 2200

#### 1 General

Typical applications of the material are fully functional parts with high end finish right from the process, which easily withstand high mechanical and thermal load.

PA 2200 is suitable for processing on the following systems:

- EOSINT P 730, P 700
- EOSINT P 390, P 385, P 380i, P 380, with or without powder conveying system  
EOSINT P 360 with upgrade S&tP, P 350/2 with upgrade 99 and upgrade S&tP
- FORMIGA P 100

#### 2 Technical data

##### General material properties

Average grain size	ISO 13320-11	56	μm
	Laser diffraction	2.20	mil
Bulk density	EN ISO 60	0.45	g/cm <sup>3</sup>
Density of laser-sintered part	EOS method	0.93	g/cm <sup>3</sup>
		58	lb/ft <sup>3</sup>

##### Mechanical properties

Tensile modulus	EN ISO 527	1700	MPa
	ASTM D638	247	ksi
Tensile strength	EN ISO 527	48	MPa
	ASTM D638	6962	psi

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Elongation at break	EN ISO 527	24	%
Elongation at break	ASTM D638	24	%
Flexural modulus	EN ISO 178	1500	MPa
	ASTM D790	217	ksi
Flexural strength	EN ISO 178	58	MPa
	ASTM D790	8412	psi
Charpy - Impact strength	EN ISO 179	53	kJ/m <sup>2</sup>
Charpy - Notched impact strength	EN ISO 179	4.8	kJ/m <sup>2</sup>
Izod - Impact strength	EN ISO 180	32.8	kJ/m <sup>2</sup>
Izod - Notched impact strength	EN ISO 180	4.4	kJ/m <sup>2</sup>
Ball indentation hardness	EN ISO 2039	78	N/mm <sup>2</sup>
Shore D - hardness	ISO 868	75	-
	ASTM D2240	75	-

The mechanical properties depend on the x-, y-, z-position and on the exposure parameters used.

### Thermal properties

Melting point	EN ISO 11357-1	172 - 180	°C
Vicat softening temperature B/50	EN ISO 306	163	°C
	ASTM D1525	325	°F
Vicat softening temperature A/50	EN ISO 306	181	°C
	ASTM D1525	358	°F

The data are based on our latest knowledge and are subject to changes without notice. They do not guarantee properties for a particular part and in a particular application.

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