

PA 2210 FR PA12 FR

EOS GmbH - Electro Optical Systems

3D Data	dry / cond	Unit	Test Standard
The properties of parts manufactured using additive manufacturing technolog due to their layer-by-layer production, to some extent direction dependent. T	y (e.g. laser sintering, stereolithog	raphy, Fused Depo	osition Modelling, 3D printing) are,
	nis has to be considered when des	igning the part and	•
Tensile Modulus			ISO 527
X Direction	2500 / 2400	MPa	
Y Direction	2500 / 2400	MPa	
Z Direction	2300 / 2200	МРа	
Tensile Strength			ISO 527
X Direction	46 / 43	MPa	
Y Direction	46 / 43	MPa	
Z Direction	41 / 38	МРа	
Strain at Tensile Strength			ISO 527
X Direction	4 / 6	%	
Y Direction	4 / 6	%	
Z Direction	3 / 4	%	
Strain at break			ISO 527
X Direction	4 / 7	%	
Y Direction	4 / 7	%	
Z Direction	3 / 4	%	
Flexural Modulus (23°C, X Direction)	2300 / -	MPa	ISO 178
Flexural Strength (X Direction)	65 / -	MPa	ISO 178
Thermal properties	dry / cond	Unit	Test Standard
Melting temperature (20°C/min)	185 / *	°C	ISO 11357-1/-3
Flammability	•		CS 25 / JAR25 / FAR 25 § 25-853
Test passed, 12s Ignition Time	1.7	mm	
Test passed, 12s Ignition Time	2.0	mm	
Smoke Density			ABD 0031 (Issue:F), method: AITM 2.0007
Test passed	1.7	mm	
Test passed	2.0	mm	
Toxicity			ABD 0031 (Issue:F), method: AITM 3.0005
	1.7	mm	
Test passed	1./		
Test passed Test passed	2.0	mm	
·		mm	UL 94
Test passed		mm mm	UL 94
Test passed Burning behavior	2.0		UL 94
Test passed Burning behavior Test passed, HB	2.0	mm	UL 94
Test passed Burning behavior Test passed, HB Test passed, HB	2.0 1.1 1.2	mm mm	UL 94
Test passed Burning behavior Test passed, HB	2.0 1.1 1.2 1.3	mm mm mm	UL 94
Test passed Burning behavior Test passed, HB	2.0 1.1 1.2 1.3 1.4	mm mm mm mm	UL 94
Test passed Burning behavior Test passed, HB Test passed, V-0	2.0 1.1 1.2 1.3 1.4 3.0 2.0	mm mm mm mm mm	UL 94
Test passed Burning behavior Test passed, HB	2.0 1.1 1.2 1.3 1.4 3.0	mm mm mm mm	UL 94

Last change: 2018-11-22 Source: www.materialdatacenter.com

Powder colour (ac. to safety data sheet)

Other properties

Density (lasersintered)

Colour of the components

Test Standard

EOS Method

The data correspond to our knowledge and experience at the time of publication. They do not on their own represent a sufficient basis for any part design, neither do they provide any agreement about or guarantee the specific properties of a product or part or the suitability of a product or part for a specific application. It is the responsibility of the producer or customer of a part to check its properties as well as its suitability for a particular purpose. This also applies regarding the consideration of possible intellectual property rights as well as laws and regulations. The data are subject to change without notice as part of EOS' continuous development and improvement processes.

dry / cond

White

White

1060 / -

Unit

kg/m³

Characteristics

Processing

3D Printing, Additive Manufacturing, Laser Sintering, Rapid Prototyping

Delivery form

Powder

Special Characteristics

Flame retardant

eatures

High Crystallinity, Thermal Stability, Homopolymer

Chemical Resistance

General Chemical Resistance, Grease Resistance, Oil Resistance

Applications

Aircraft and Aerospace, Electrical and Electronical