

POLYMER SOLUTIONS

PA 2220 HighReuse

Material Data Sheet

PA 2220 HIGHREUSE

Product Description

EOS PA 2220 HighReuse is a highly efficient polyamide 12 material serving a broad variety of applications thanks to its balanced property profile. With a reusability rate of 70 % it contributes to lower cost per part, less material waste and a reduced powder carbon footprint.

MAIN CHARACTERISTICS

- Contributing to reduced material waste and lower cost per part
- Balanced property profile
- White multipurpose material
- Easy to color with state-of-the-art solutions

TYPICAL APPLICATIONS

- Eyewear in the consumer goods industry
- Structural components, e.g., brackets
- Production equipment like grippers, jigs and fixtures
- Spare parts like covers, e.g., in the automotive industry
- Functional parts for prototyping incl. integrated hinges or threads

MECHANICAL PROPERTIES	DRY / CONDITIONED	UNIT	TEST STANDARD
Tensile Modulus			ISO 527-1/-2
X Orientation	1800 / 1500	MPa	
Y Orientation	1800 / 1500	MPa	
Z Orientation	1800 / 1300	MPa	
Tensile Strength			ISO 527-1/-2
X Orientation	48 / 45	MPa	
Y Orientation	48 / 45	MPa	
Z Orientation	48 / 42	MPa	
Strain at Break			ISO 527-1/-2
X Orientation	10 / 14	%	
Y Orientation	9 / 15	%	
Z Orientation	8 / 12	%	
Charpy Impact Strength (+23°C)			ISO 179/1eU
X Orientation	24 / -	kJ/m ²	
Y Orientation	23 / -	kJ/m ²	
Z Orientation	19 / -	kJ/m ²	
Charpy Impact Strength (-30°C)			ISO 179/1eU
Z Orientation	18 / -	kJ/m ²	
Charpy Notched Impact Strength (+23°C)			ISO 179/1eA
X Orientation	2,6 / -	kJ/m ²	
Y Orientation	2,3 / -	kJ/m ²	
Z Orientation	2,5 / -	kJ/m ²	
Charpy Notched Impact Strength (-30°C)			ISO 179/1eA
Z Orientation	2,1 / -	kJ/m ²	
Shore D Hardness			ISO 7619-1
X Orientation	79 / -	-	

THERMAL PROPERTIES	DRY / CONDITIONED	UNIT	TEST STANDARD
Melting Temperature	176,5	°C	ISO 11357-1/-3
Temperature of Deflection under Load 1.80 MPa			ISO 75-1/-2
X Orientation	64	°C	
Z Orientation	57	°C	

OTHER PROPERTIES	VALUE	UNIT	TEST STANDARD
Density	0.99	g/cm ³	DIN EN ISO 1183
Powder Color	white	-	-
Components Color	white	-	-

HEADQUARTERS

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