

Amodel® Bios AS R1-133

PPA-GF33

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11100	MPa	ISO 527
Tensile Strength	197	MPa	ISO 527
Strain at break	2.6	%	ISO 527
Flexural modulus, 23°C	10400	MPa	ISO 178
Flexural strength	282	MPa	ISO 178
Izod impact strength, +23°C	60	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	9	kJ/m ²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	315	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	279	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	300	°C	ISO 75-1/-2

Other properties	Value	Unit	Test Standard
Density	1430	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 130	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.06	%	-
Melt temperature	325 - 345	°C	-
Mold temperature	150 - 170	°C	-
Zone 1	305 - 320	°C	-
Zone 2	320 - 335	°C	-
Injection speed	75 - 100	mm/s	-

Characteristics**Processing**

Injection Molding

Delivery form

Pellets, Black, Natural Color

Special Characteristics

High impact or impact modified

Features

Creep Resistance

Chemical Resistance

General Chemical Resistance

Certifications

Contains renewable resources, RoHS compliant

Applications

Aircraft and Aerospace, Automotive

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa