

**Amodel® Bios HFFR R1-133**

PPA-GF33

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	11900	MPa	ISO 527
Tensile Strength	148	MPa	ISO 527
Strain at break	2.1	%	ISO 527
Flexural modulus, 23°C	11700	MPa	ISO 178
Flexural strength	243	MPa	ISO 178
Izod impact strength, +23°C	49	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	7.9	kJ/m <sup>2</sup>	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	315	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	275	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	299	°C	ISO 75-1/-2

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	600	-	IEC 60112

Other properties	Value	Unit	Test Standard
Density	1490	kg/m <sup>3</sup>	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**

Flame retardant, Halogen-free, High impact or impact modified

**Features**

Creep Resistance

**Chemical Resistance**

General Chemical Resistance

**Certifications**

Contains renewable resources, RoHS compliant

**Applications**

Aircraft and Aerospace, Automotive, Electrical and Electronical

**Regional Availability**

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