

Amodel® AE-1133 NT

PPA-GF33

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.004	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.008	mm/mm	ASTM D 955
Mechanical properties			
ISO Data			
Tensile Modulus	13400	MPa	ISO 527
Stress at break	233	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Flexural modulus, 23°C	11600	MPa	ISO 178
Flexural modulus	9800	MPa	ISO 178
Flexural modulus temperature	100	°C	-
Flexural strength	319	MPa	ISO 178
Charpy impact strength, +23°C	73	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	9.5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	49	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	8.8	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	13100	MPa	ASTM D 638
Tensile Strength	221	MPa	ASTM D 638
Elongation at Break	2.5	%	ASTM D 638
Compressive Strength	185	MPa	ASTM D 695
Flexural Modulus	11400	MPa	ASTM D 790
Flexural Strength	317	MPa	ASTM D 790
Rockwell Hardness	R 125	-	ASTM D 785
Izod Impact notched, 1/8 in	80	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	770	J/m	ASTM D 256
Thermal properties			
ISO Data			
Melting temperature, 10°C/min	313	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	280	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	24	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	55	E-6/K	ASTM D 696
DTUL @ 66 psi	297^[ann.]	°C	ASTM D 648
DTUL @ 264 psi	285^[ann.]	°C	ASTM D 648
Melting Temperature	313	°C	ASTM D 3418
ann.: annealed			
Electrical properties			
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	21	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.005	-	ASTM D 150
Dissipation Factor, 1 MHz	0.017	-	ASTM D 150
Dielectric Constant, 60 Hz	4.4	-	ASTM D 150
Dielectric Constant, 1 MHz	4.2	-	ASTM D 150
Volume Resistivity	1E16	Ohm*cm	ASTM D 257
Arc Resistance	140	s	ASTM D 495
Other properties			
Density	1480	kg/m ³	ISO 1183
Water Absorption, 24hr	0.21	%	ASTM D 570

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.045	%	-
Melt temperature	321 - 343	°C	-
Mold temperature	135	°C	-
Zone 1	304 - 318	°C	-
Zone 2	316 - 329	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets, Natural Color

Special Characteristics

Heat stabilized or stable to heat

Features

Creep Resistance

Chemical Resistance

General Chemical Resistance

Certifications

RoHS compliant

Applications

Automotive, Electrical and Electronical

Regional Availability

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