

Amodel® AE-4133

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
Water Absorption, 24hr	0.23	%	ASTM D 570

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	12000 / -	MPa	ISO 527
Stress at Break	210 / -	MPa	ISO 527
Strain at Break	2.5 / -	%	ISO 527
Impact Strength (Charpy), +23°C	79 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	9 / -	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	10700 / -	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	9.2 / -	kJ/m²	ISO 180/1A
Impact Strength (Izod), 23°C	68 / -	kJ/m²	ISO 180/1U

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	327 / *	°C	ISO 11357-1/-3
Glass Transition Temperature (10°C/min)	95 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	300 / *	°C	ISO 75-1/-2
Burning Behav. at thickness h	HB / *	class	UL 94
Thickness tested	3.2 / *	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	19 / 19	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.006 / 0.02	-	ASTM D 150
Dissipation Factor, 1 MHz	0.015 / 0.019	-	ASTM D 150
Dielectric Constant, 60 Hz	4.1 / 4.3	-	ASTM D 150
Dielectric Constant, 1 MHz	3.75 / 3.4	-	ASTM D 150
Volume Resistivity	0 / 5E14	Ohm*cm	ASTM D 257

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1450 / -	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.06	%	-
Melt temperature	330 - 345	°C	-
Mold temperature	65 - 95	°C	-
Zone 1	320 - 330	°C	-
Zone 2	320 - 330	°C	-
Zone 3	327 - 335	°C	-
Injection speed	75 - 100	mm/s	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black, Natural Color

Special Characteristics

Heat aging stabilized

Features

Creep Resistance

Chemical Resistance

General Chemical Resistance

Applications

Automotive, Electrical and Electronical