

**Amodel® AS-4145 HS**

PPA-GF45

Syensqo

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Mold Shrinkage, MD	<b>0.005</b>	mm/mm	ASTM D 955
Mold Shrinkage, TD	<b>0.01</b>	mm/mm	ASTM D 955
<b>Mechanical properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	<b>16100 / -</b>	MPa	ISO 527
Stress at break	<b>224 / -</b>	MPa	ISO 527
Strain at break	<b>2.2 / -</b>	%	ISO 527
Flexural modulus, 23°C	<b>13400 / -</b>	MPa	ISO 178
Charpy impact strength, +23°C	<b>63 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>10 / -</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	<b>10 / -</b>	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	<b>15200 / 15200</b>	MPa	ASTM D 638
Tensile Strength at Break	<b>228 / 186</b>	MPa	ASTM D 638
Elongation at Break	<b>2.4 / 2.1</b>	%	ASTM D 638
Compressive Strength	<b>172 / 159</b>	MPa	ASTM D 695
Flexural Modulus	<b>13100 / 13100</b>	MPa	ASTM D 790
Izod Impact notched, 1/8 in	<b>100 / 96</b>	J/m	ASTM D 256
<b>Thermal properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature, 10°C/min	<b>320 / *</b>	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	<b>298 / *</b>	°C	ISO 75-1/-2
Burning behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>3.2 / *</b>	mm	-
<b>ASTM Data</b>			
Melting Temperature	<b>320</b>	°C	ASTM D 3418
<b>Electrical properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>24 / 25</b>	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	<b>0.004 / 0.024</b>	-	ASTM D 150
Dissipation Factor, 1 MHz	<b>0.011 / 0.037</b>	-	ASTM D 150
Dielectric Constant, 60 Hz	<b>4 / 4.9</b>	-	ASTM D 150
Dielectric Constant, 1 MHz	<b>3.7 / 4</b>	-	ASTM D 150
Volume Resistivity	<b>&gt;1E15 / 6E14</b>	Ohm*cm	ASTM D 257
<b>Other properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1550 / -</b>	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	<b>0.21</b>	%	ASTM D 570
<b>Processing Recommendation Injection Molding</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>121</b>	°C	-
Pre-drying - Time	<b>4</b>	h	-
Processing humidity	<b>≤0.1</b>	%	-
Melt temperature	<b>329 - 343</b>	°C	-
Mold temperature	<b>66 - 93</b>	°C	-
Feed temperature	<b>79</b>	°C	-
Zone 1	<b>318 - 324</b>	°C	-
Zone 2	<b>327 - 332</b>	°C	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Additives**

Lubricants, Release agent

**Special Characteristics**

Heat stabilized or stable to heat

**Features**

Creep Resistance, High Crystallinity

**Chemical Resistance**

General Chemical Resistance

**Applications**Automotive, IT / Business Machine, Electrical and Electronical,  
General Purpose**Regional Availability**

North America, Europe, Asia Pacific