

**PlusTek PA301G33BK23**

PA66-GF33

Polyram

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	10800	MPa	ISO 527
Tensile Strength	190	MPa	ISO 527
Strain at break	2.8	%	ISO 527
Flexural modulus, 23°C	8800	MPa	ISO 178
Flexural strength	285	MPa	ISO 178
Charpy impact strength, +23°C	75	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	11	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	11.5	kJ/m <sup>2</sup>	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	262	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	242	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	260	°C	ISO 75-1/-2

Other properties	Value	Unit	Test Standard
Water absorption	7	%	Sim. to ISO 62
Humidity absorption	2	%	Sim. to ISO 62
Density	1390	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.15	%	-
Mold temperature	80 - 90	°C	-
Feed temperature	60 - 70	°C	-
Zone 1	260 - 280	°C	-
Zone 2	260 - 280	°C	-
Zone 3	280 - 300	°C	-

**Characteristics****Processing**

Injection Molding

**Delivery form**

Black

**Special Characteristics**

Heat stabilized or stable to heat

**Certifications**

RoHS compliant

**Applications**

Automotive

**Regional Availability**

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