

**Polytron® P20B11BK11-9B9**

PP-GLF20

Polyram

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	5700	MPa	ISO 527
Tensile Strength	90	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Flexural modulus, 23°C	5300	MPa	ISO 178
Flexural strength	140	MPa	ISO 178
Charpy impact strength, +23°C	40	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	15	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	168	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	150	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	158	°C	ISO 75-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.0	mm	-
<b>Other properties</b>			
Density	1030	kg/m <sup>3</sup>	ISO 1183
<b>Processing Recommendation Injection Molding</b>			
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Mold temperature	50 - 70	°C	-
Zone 1	230 - 250	°C	-
Zone 2	230 - 250	°C	-
Zone 3	230 - 250	°C	-

**Characteristics****Processing**

Injection Molding

**Certifications**

RoHS compliant

**Delivery form**

Pellets, Black

**Applications**

Automotive

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

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

**Features**

Chemically Coupled Reinforcement, Long fiber reinforced