

**NYLENE® 5145 HS**

PA66-GF45

Polymeric Resources Corporation

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.02	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Strength	182	MPa	ISO 527
Flexural modulus, 23°C	9220	MPa	ISO 178
Charpy impact strength, +23°C	132	kJ/m <sup>2</sup>	ISO 179/1eU

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	255	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	242	°C	ISO 75-1/-2

Other properties	Value	Unit	Test Standard
Density	1500	kg/m <sup>3</sup>	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65 - 82	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.2	%	-
Melt temperature	287 - 316	°C	-
Mold temperature	82 - 93	°C	-
Zone 1	260 - 293	°C	-
Zone 2	277 - 299	°C	-
Zone 3	282 - 310	°C	-
Nozzle temperature	279 - 307	°C	-
Injection pressure	5 - 15	MPa	-
Back pressure	0 - 50	MPa	-
Holding pressure	4 - 12	MPa	-
Maximum residence time	6	min	-

**Characteristics****Processing**

Injection Molding

**Additives**

Lubricants

**Special Characteristics**

Heat stabilized or stable to heat

**Chemical Resistance**

General Chemical Resistance, Oil Resistance

**Applications**

Automotive, Electrical and Electronical, General Purpose

**Regional Availability**

North America