

**NYLENE 409**

PA6

Polymeric Resources Corporation

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Mold Shrinkage, MD	<b>0.009</b>	mm/mm	ASTM D 955

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Tensile Strength	<b>75.2</b>	MPa	ASTM D 638
Flexural Modulus	<b>2758</b>	MPa	ASTM D 790
Izod Impact notched, 1/8 in	<b>42.7</b>	J/m	ASTM D 256

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
DTUL @ 66 psi	<b>182</b>	°C	ASTM D 648
DTUL @ 264 psi	<b>71.1</b>	°C	ASTM D 648
Melting Temperature	<b>216</b>	°C	ASTM D 3418

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1130</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>66 - 82</b>	°C	-
Pre-drying - Time	<b>2 - 4</b>	h	-
Processing humidity	<b>≤0.2</b>	%	-
Melt temperature	<b>238 - 271</b>	°C	-
Mold temperature	<b>49 - 93</b>	°C	-
Zone 1	<b>221 - 249</b>	°C	-
Zone 2	<b>227 - 260</b>	°C	-
Zone 3	<b>238 - 271</b>	°C	-
Nozzle temperature	<b>238 - 271</b>	°C	-
Injection pressure	<b>4 - 12</b>	MPa	-
Back pressure	<b>0 - 50</b>	MPa	-
Holding pressure	<b>3 - 9</b>	MPa	-
Maximum residence time	<b>6</b>	min	-

**Characteristics****Processing**

Injection Molding

**Applications**

Automotive, General Purpose

**Special Characteristics**

Heat stabilized or stable to heat

**Regional Availability**

North America

**Features**

Nucleated