

**Integra™ PA6-6027**

PolySource, LLC - Polyamide 6

**General Information**
**Product Description**

Nylon 6, Lubricated, Nucleated

**General**

Material Status	• Commercial: Active
Availability	• North America
Additive	• Lubricant • Nucleating Agent
Features	• Lubricated • Nucleated
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.14		ASTM D792
Molding Shrinkage - Flow	0.011 to 0.014	in/in	ASTM D955
Molding Shrinkage - Across Flow	0.011 to 0.014	in/in	ASTM D955
Water Absorption (24 hr)	2.8	%	ASTM D570
<b>Mechanical</b>			
Tensile Modulus	405000	psi	ASTM D638
Tensile Strength (Yield)	13100	psi	ASTM D638
Tensile Elongation (Break)	> 70	%	ASTM D638
<b>Impact</b>			
Notched Izod Impact	1.0	ft-lb/in	ASTM D256
<b>Thermal</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	352	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	170	°F	ASTM D648
Melting Temperature	428	°F	ASTM D3418
<b>Flammability</b>			
Flame Rating (0.031 in, all colors)	V-2		UL 94

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.12 to 0.18	%
Rear Temperature	480 to 540	°F
Middle Temperature	500 to 560	°F
Nozzle Temperature	520 to 560	°F
Processing (Melt) Temp	500 to 560	°F
Back Pressure	50.0	psi
Mold Temperature	80 to 180	°F

**Injection Notes**

 Drying Temperature, -40 °C dew point  
 Drying Time, do not exceed 8 hrs
