

## Nylene® 52 IM12

Polymeric Resources Corporation (PRC) - Polyamide 6

### General Information

#### Product Description

Very High Impact Resistance, Nylon 6 Compound

#### General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Impact Resistance
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.09		ASTM D792
Molding Shrinkage - Flow	0.012 to 0.018	in/in	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 73°F)	9140	psi	ASTM D638
Tensile Elongation (Break)	> 10	%	ASTM D638
Flexural Modulus	310000	psi	ASTM D790
Flexural Strength	8990	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.90	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	331	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	129	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	HB		UL 94

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	460 to 520	°F
Middle Temperature	480 to 520	°F
Front Temperature	480 to 520	°F
Nozzle Temperature	480 to 559	°F
Processing (Melt) Temp	480 to 559	°F
Mold Temperature	81 to 160	°F
Back Pressure	50.0 to 100	psi

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

