

## Nylene® 494P IM

Polymeric Resources Corporation (PRC) - Polyamide 6

### General Information

#### Product Description

- Engineered for rotational molding, Nylene 949P IM nylon 6 compound combines high impact strength, heat stability, and fine pulverization for optimal performance.
- Enables the production of single-layer material fuel tanks or serves as a barrier layer in two-layer applications.
- Exceptional resistance to imprints and abrasions.
- Maintain structural integrity at elevated temperatures and retains impact resistance in low-temperature conditions.
- Withstands exposure to aromatic solvents and chemicals.
- Meets CARB and EPA fuel permeation regulations, ensuring regulatory compliance.

#### General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Impact Modifier		
Features	• Abrasion Resistant	• High Heat Resistance	• Paintable
	• Creep Resistant	• Impact Modified	• Wear Resistant
	• Good Strength	• Low Friction	
	• High ESCR (Stress Crack Resist.)	• Machinable	
Uses	• Automotive Applications	• Housings	• Tanks
	• Fuel Tanks	• Lawn & Garden Equipment	
Appearance	• Cream	• Tan	
Forms	• Powder		
Processing Method	• Rotational Molding		

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Melt Mass-Flow Rate (MFR)	17	g/10 min	ASTM D1238
Water Absorption (Equilibrium)	1.8	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 73°F)	7690	psi	ASTM D638
Tensile Elongation (Break)	> 100	%	ASTM D638
Flexural Modulus	265000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength <sup>2</sup> (73°F)	125	ft-lb	ARM
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	216	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	120	°F	ASTM D648
Peak Melting Temperature	428	°F	ASTM D3418
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Automotive Burn Test	Pass		FMVSS 302

### Processing Information

Injection	Nominal Value	Unit
Drying Time	0.33 to 0.42	hr
Suggested Max Moisture	0.20	%
Processing (Melt) Temp	550 to 649	°F

### Notes

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

