Nylene® 494P IM BLK

Polymeric Resources Corporation (PRC) - *Polyamide 6*

General Information

Product Description

- Engineered for rotational molding, Nylene 494P IM BLK 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 impacts and abrasions.
- Maintains 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	• Heat Stabilizer		
Features	• Abrasion Resistant • Copolymer • Creep Resistant • Good Strength	• Heat Stabilized • High ESCR (Stress Crack Resist.) • High Heat Resistance • Low Friction	• Low Temperature Impact Resistance • Machinable • Paintable • Wear Resistant
Uses	• Automotive Applications • Fuel Tanks	• Housings • Lawn & Garden Equipment	• Tanks
Appearance	• Black		
Forms	• Powder		
Processing Method	• Rotational Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Melt Mass-Flow Rate (MFR)	20	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 [2] (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 (0.12 in)	HB		UL 94
Automotive Burn Test	PASS		FMVSS 302
Additional Information			
CARB Executive Order:: Q-13-016			

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

[1] Typical properties: these are not to be construed as specifications.

[2] Roto Specimen