Nylene® 743

Polymeric Resources Corporation (PRC) - *Polyamide 6*

General Information

Product Description

- Designed for excellent cold temperature impact.
- High impact modification nylon 6 suitable for both molding and extrusion.
- Parts molded from 743 have excellent impact strength right out of the mold without post conditioning.
- Outstanding high strength and high cold temperature impact.
- Cylinder temperatures should be in the 435 - 525°F range.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Impact Modifier		
Features	• High Impact Resistance • High Strength	• Impact Modified • Low Temperature Impact Resistance	
Uses	• Automotive Applications • Fuel Tanks	• Lawn & Garden Equipment • Profiles	• Tanks • Tubing
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	7690	psi	ASTM D638
Tensile Elongation (Break)	150	%	ASTM D638
Flexural Modulus	230000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
--	No Break		
-40°F	3.5	ft·lb/in	
Impact Strength [2]			ARM
-22°F	150	ft·lb	
-40°F	150	ft·lb	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	426	°F	ASTM D3418
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Drop Weight Impact Strength - RT	150	ft·lb	ARM

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	151 to 180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.20	%
Suggested Shot Size	25 to 75	%
Suggested Max Regrind	25	%
Processing (Melt) Temp	441 to 559	°F
Mold Temperature	120 to 199	°F