

Nylene® 743 BLK

Polymeric Resources Corporation (PRC) - Polyamide 6

General Information

Product Description

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

General

Material Status	• Commercial: Active
Availability	• North America
Features	• High Impact Resistance • High Strength • Low Temperature Impact Resistance
Uses	• Automotive Applications • Lawn & Garden Equipment • Tanks • Fuel Tanks • Profiles • Tubing
Appearance	• Black
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
-40°F	150	ft·lb	
-22°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 Re grind	25	%
Processing (Melt) Temp	441 to 559	°F
Mold Temperature	120 to 199	°F

