

Nylene® 52FD

Polymeric Resources Corporation (PRC) - Polyamide 6

General Information

Product Description

Improved Viscosity, FDA Compliant, Nylon 6

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Medium Viscosity
Agency Ratings	• FDA
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Viscosity Number	135	cm ³ /g	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 73°F)	11000	psi	ASTM D638
Tensile Elongation (Break)	> 10	%	ASTM D638
Flexural Modulus	420000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.81	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	379	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	140	°F	ASTM D648
Peak Melting Temperature	428	°F	ASTM D3418
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	2.0E-3	%
Rear Temperature	441 to 500	°F
Middle Temperature	441 to 500	°F
Front Temperature	450 to 520	°F
Nozzle Temperature	450 to 520	°F
Processing (Melt) Temp	450 to 520	°F
Mold Temperature	81 to 160	°F
Back Pressure	50.0 to 100	psi

Notes

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

