Pro-fax PF511

Polypropylene, Homopolymer

Product Description

Pro-fax PF511 radiation resistant, high melt flow, controlled rheology polypropylene homopolymer is available in pellet form. This resin is typically used in injection molding applications and offers retention of physical properties and color after radiation sterilization and good processability.

This resin resists yellowing and embrittlement after gamma radiation. However, since performance and appearance after radiation sterilization can be sensitive to design and processing choices, the users should verify performance in their application.

Our customers typically use this resin in applications such as medical devices, syringes, test tubes and blood vials.

For regulatory compliance information see *Pro-fax* PF511 Product Stewardship Bulletin (PSB).

Product Characteristics

Status	Commercial: Active
Test Method used	ASTM
Availability	North America
Processing Methods	Injection Molding
Features	Good Color Stability, Good Processability, Radiation Resistant
Typical Customer Applications	Labware, Medical Devices

Typical Properties	Method	Value	Unit
Physical			
Density -Specific Gravity	ASTM D 792	0.90	
Note: 23/23°C Method B			
Melt Flow Rate (230°C/2.16kg)	ASTM D 1238	20	g/10 min
Mechanical			
Flexural Modulus	ASTM D 790		
(0.05 in/min, 1% Secant, Procedure A)		110000	psi
(1.3 mm/min, 1% Secant, Procedure A)		760	MPa
Tensile Strength @ Yield	ASTM D 638		
(2 in/min)		3900	psi
(50 mm/min)		27	MPa
Tensile Elongation @ Yield	ASTM D 638	16	%
Impact			
Notched Izod Impact	ASTM D 256		
(73 °F, Method A)		0.6	ft-lb/in
(23 °C, Method A)		32	J/m
Thermal			
Deformation Temperature Under Load	ASTM D 648		
(66 psi)		171	°F
(0.45 MPa)		77	°C
Note: Unannealed			

Notes

Typical properties; not to be construed as specifications.