



## Pro-fax PF531

### Polypropylene, Homopolymer

#### Product Description

*Pro-fax* PF531 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.

*Pro-fax* PF531 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 radiation-sterilizable medical and laboratory devices.

For regulatory compliance information see *Pro-fax* PF531 Product Stewardship Bulletin (PSB).

#### Product Characteristics

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

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density -Specific Gravity <i>Note: 23/23°C Method B</i>	ASTM D 792	0.90	
Melt Flow Rate (230°C/2.16kg)	ASTM D 1238	27	g/10 min
<b>Mechanical</b>			
Flexural Modulus (0.05 in/min, 1% Secant, Procedure A) (1.3 mm/min, 1% Secant, Procedure A)	ASTM D 790	120000 830	psi MPa
Tensile Strength @ Yield (2 in/min) (50 mm/min)	ASTM D 638	3900 27	psi MPa
Tensile Elongation @ Yield	ASTM D 638	15	%
<b>Impact</b>			
Notched Izod Impact (73 °F, Method A) (23 °C, Method A)	ASTM D 256	0.6 32	ft-lb/in J/m
<b>Thermal</b>			
Deformation Temperature Under Load (66 psi) (0.45 MPa) <i>Note: Unannealed</i>	ASTM D 648	171 77	°F °C

#### Notes

Typical properties; not to be construed as specifications.