

## Solvay Specialty Polymers Radel<sup>®</sup> R-7558 Polyphenylsulfone (PPSU)

Category : Polymer , Thermoplastic , Polyphenylsulfone (PPSU)

### Material Notes:

Radel<sup>®</sup> R-7558 polyphenylsulfone resin is a cost-effective solution for aircraft interior applications. This product complies with the FAA regulation 14CFR Part 25 Appendix F, offering vertical burn resistance, very low smoke generation and, through the use of proprietary additives, low heat release values by the Ohio State University (OSU) rate of heat release method. It also generates low flaming-mode toxic gas emissions. Features: Detergent Resistant; Flame Retardant; Good Flow; Good Processing Stability; Good Toughness; Low Smoke Emission; Low Toxicity Uses: Aerospace Applications; Aircraft Applications; Aircraft Interiors Additional Properties: OSU Peak Heat Release Rate - FAR 25, AppF < 55.0 kW/m<sup>2</sup>; OSU Total Heat Release - FAR 25, AppF < 20.0 kW·min/m<sup>2</sup>; Smoke Density - FAR 25, AppF < 5.0 Ds; Vertical Burn - 60 second - FAR 25, AppF No Drip; Vertical Burn - 60 second - FAR 25, AppF 0.0 hr; Vertical Burn - 60 second - FAR 25, AppF < 7.62 cm Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Radel-R-7558-Polyphenylsulfone-PPSU.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Radel-R-7558-Polyphenylsulfone-PPSU.php)

Physical Properties	Metric	English	Comments
Density	1.35 g/cc	0.0488 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.36 % @Time 86400 sec	0.36 % @Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm	0.0060 - 0.0080 in/in	
Melt Flow	18 g/10 min @Load 2.16 kg, Temperature 380 °C	18 g/10 min @Load 4.76 lb, Temperature 716 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength	72.4 MPa	10500 psi	ASTM D638
Elongation at Break	40 %	40 %	ASTM D638
Tensile Modulus	2.34 GPa	339 ksi	ASTM D638
Flexural Strength	100 MPa	14500 psi	ASTM D790
Flexural Modulus	2.41 GPa	350 ksi	ASTM D790
Izod Impact, Notched	1.60 J/cm	3.00 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	196 °C	385 °F	Unannealed; ASTM D648

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	354 - 371 Å°C	669 - 700 Å°F	
Middle Barrel Temperature	360 - 377 Å°C	680 - 711 Å°F	
Front Barrel Temperature	366 - 382 Å°C	691 - 720 Å°F	
Nozzle Temperature	360 - 377 Å°C	680 - 711 Å°F	
Melt Temperature	366 - 388 Å°C	691 - 730 Å°F	
Mold Temperature	107 - 163 Å°C	225 - 325 Å°F	
Drying Temperature	166 - 177 Å°C @Time 14400 sec	331 - 351 Å°F @Time 4.00 hour	

Descriptive Properties	Value	Comments
Agency Ratings	FAA FAR 25.853a; FAA FAR 25.853d; OSU 55/55	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Colors Available	
Form	Pellets	
Processing Technique	Injection Molding	
Screw Compression Ratio	2.0:1.0 to 3.0:1.0	

## Contact Songhan Plastic Technology Co.,Ltd.

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