

# Radel® R-7535

Polyphenylsulfone

Solvay Specialty Polymers

## Message:

Radel® R-7535 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.

Radel® R-7535 is formulated for darker, integrally colored applications where there is low UV exposure. An alternate grade, Radel® R-7558, is available for lighter applications with low UV exposure.

Available in several custom colors

General Information			
Features	Detergent Resistant		
	Flame Retardant		
	Good Flow		
	Good Processing Stability		
	Good Toughness		
	Low Smoke Emission		
	Low Toxicity		
Uses	Aerospace Applications		
	Aircraft Applications		
	Aircraft Interiors		
Agency Ratings	FAA FAR 25.853a		
	FAA FAR 25.853d		
	OSU 55/55		
RoHS Compliance	Contact Manufacturer		
Appearance	Colors Available		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.35	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (380°C/2.16 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.60 to 0.80	%	ASTM D955
Water Absorption (24 hr)	0.36	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2340	MPa	ASTM D638
Tensile Strength	72.4	MPa	ASTM D638
Tensile Elongation (Break)	40	%	ASTM D638

Flexural Modulus	2410	MPa	ASTM D790
Flexural Strength	100	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	160	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	196	°C	ASTM D648
Flammability	Nominal Value	Unit	Test Method
OSU Peak Heat Release Rate <sup>1</sup>	< 55.0	kW/m <sup>2</sup>	FAR 25, AppF
OSU Total Heat Release - 2 min <sup>2</sup>	< 20.0	kW · min/m <sup>2</sup>	FAR 25, AppF
Smoke Density - Dmax @ 4 min <sup>3</sup>	< 5.0	Ds	FAR 25, AppF
Vertical Burn - 60 second <sup>4</sup>			FAR 25, AppF
Drip Burn Time	No Drip		
Flame Time	0.0	hr	
Length	< 7.62	cm	
Injection	Nominal Value	Unit	
Drying Temperature	166 to 177	°C	
Drying Time	4.0	hr	
Rear Temperature	354 to 371	°C	
Middle Temperature	360 to 377	°C	
Front Temperature	366 to 382	°C	
Nozzle Temperature	360 to 377	°C	
Processing (Melt) Temp	366 to 388	°C	
Mold Temperature	107 to 163	°C	
Screw Compression Ratio	2.0:1.0 to 3.0:1.0		
NOTE			

1.

Flammability test results are not intended to reflect hazards presented by these or any other material under actual fire conditions.

2.

Flammability test results are not intended to reflect hazards presented by these or any other material under actual fire conditions.

3.

Flammability test results are not intended to reflect hazards presented by these or any other material under actual fire conditions.

4.

Flammability test results are not intended to reflect hazards presented by these or any other material under actual fire conditions.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any

infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

