

Westlake Plastics Radel® R 5500 Polyphenylsulfone For Medical Applications

Category : Polymer , Thermoplastic , Polyphenylsulfone (PPSU)

Material Notes:

Medical grade Radel R5500 resin offers exceptional hydrolytic stability, toughness, heat deflection temperature and resistance to stress cracking. This polymer also has excellent thermal stability, and impact strength over a wide temperature range. Recommended sterilization techniques for Radel R5500 include EtO gas, radiation, steam autoclaving, dry heat and cold sterilization. Radel® is a trade name of Solvay Advanced Polymers. Information provided by Westlake Plastics.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Westlake-Plastics-Radel-R-5500-Polyphenylsulfone-For-Medical-Applications.php

Physical Properties	Metric	English	Comments
Density	1.29 g/cc	0.0466 lb/in ³	ASTM D792
Water Absorption	0.37 %	0.37 %	ASTM D570; 24 hrs.

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	69.6 MPa	10100 psi	ASTM D638
Elongation at Break	60 - 120 %	60 - 120 %	ASTM D638
Elongation at Yield	7.2 %	7.2 %	ASTM D638
Tensile Modulus	2.34 GPa	340 ksi	ASTM D638
Flexural Yield Strength	91.0 MPa	13200 psi	ASTM D790
Flexural Modulus	2.41 GPa	350 ksi	ASTM D790
Compressive Yield Strength	98.94 MPa	14350 psi	ASTM D695
Compressive Modulus	1.73 GPa	251 ksi	ASTM D695
Izod Impact, Notched	5.34 J/cm	10.0 ft-lb/in	ASTM D256
Izod Impact, Unnotched	NB	NB	ASTM D256
Tensile Impact Strength	399 kJ/m ²	190 ft-lb/in ²	ASTM D1822

Thermal Properties	Metric	English	Comments
CTE, linear	55.8 µm/m-°C	31.0 µin/in-°F	ASTM D696
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	0.349 W/m-K	2.42 BTU-in/hr-ft ² -°F	ASTM C177
Deflection Temperature at 0.46 MPa (66 psi)	214 °C	417 °F	ASTM D648

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	207 °C	403 °F	ASTM D648
Flammability, UL94	V-0	V-0	
	@Thickness 0.787 mm	@Thickness 0.0310 in	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China