

Solvay Specialty Polymers Radel® R-7400 Polyphenylsulfone (PPSU)

Category : Polymer , Thermoplastic , Polyphenylsulfone (PPSU)

Material Notes:

Radel® R-7300 (for light colors) and R-7400 (for darker colors) polyphenylsulfone resins were developed specifically for aircraft interior applications, and through the use of a proprietary flame retardant package, offer low heat release, low smoke generation, and low toxic gas emissions. These resins comply with the FAA regulation 14CFR Part 25.853 Appendix F. In addition, they have excellent impact resistance and ESCR when exposed to fluids typically used by the aerospace industry, reducing the need for annealing or protective films. Features: Detergent Resistant; Flame Retardant; Good Chemical Resistance; Good Processing Stability; Good Toughness; High Flow; Low Smoke Emission; Low Toxicity Uses: Aerospace Applications; Aircraft Applications; Aircraft Interiors Additional Properties: OSU Peak Heat Release Rate - FAR 25.853(d) < 55.0 kW/m²; OSU Total Heat Release - FAR 25.853(d) < 20.0 kW·min/m²; Smoke Density - ASTM F814 < 5.0 Ds; Smoke Density - ASTM F814 1.0 Ds Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Radel-R-7400-Polyphenylsulfone-PPSU.php

| Physical Properties | Metric | English | Comments |
|---------------------|---|---|------------|
| Density | 1.36 g/cc | 0.0491 lb/in ³ | ASTM D792 |
| Water Absorption | 0.30 % @Time 86400 sec | 0.30 % @Time 24.0 hour | ISO 62 |
| Melt Flow | 16 g/10 min @Load 2.16 kg, Temperature 380 °C | 16 g/10 min @Load 4.76 lb, Temperature 716 °F | ASTM D1238 |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|------------|---------------|-----------|
| Tensile Strength | 75.8 MPa | 11000 psi | ASTM D638 |
| Elongation at Break | 40 % | 40 % | ASTM D638 |
| Tensile Modulus | 2.79 GPa | 405 ksi | ASTM D638 |
| Flexural Strength | 110 MPa | 16000 psi | ASTM D790 |
| Flexural Modulus | 2.76 GPa | 400 ksi | ASTM D790 |
| Izod Impact, Notched | 0.800 J/cm | 1.50 ft-lb/in | ASTM D256 |

| Thermal Properties | Metric | English | Comments |
|---|--------|---------|-----------------------|
| Deflection Temperature at 1.8 MPa (264 psi) | 182 °C | 360 °F | Unannealed; ASTM D648 |

| Processing Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| Rear Barrel Temperature Processing Properties | 354 - 371 Â°C Metric | 669 - 700 Â°F English | Comments |
|--|----------------------------|----------------------------|----------|
| Middle Barrel Temperature | 360 - 377 Â°C | 680 - 711 Â°F | |
| Front Barrel Temperature | 366 - 382 Â°C | 691 - 720 Â°F | |
| Nozzle Temperature | 360 - 377 Â°C | 680 - 711 Â°F | |
| Melt Temperature | 366 - 388 Â°C | 691 - 730 Â°F | |
| Mold Temperature | 107 - 163 Â°C | 225 - 325 Â°F | |
| Drying Temperature | 149 Â°C @Time 14400 sec | 300 Â°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 | |
| Injection Rate | Fast | |
| Processing Technique | Injection Molding | |
| Screw Compression Ratio | 2.0:1.0 to 3.0:1.0 | |

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