Material Solutions For The Medical Industry

Quadrant® PPSU – Quadrant Life Science Grade

Key Benefits
• Meets biocompatibility requirements per ISO 10993-5
• Increased safety and approval facilitation
• Reduced cost and time
• Available in many standard colors including blue, grey, natural, black, red, green, brown, rust and yellow
• Various combinations of shape sizes provide manufacturers an ideal yield with minimal waste

Common Applications
• Trial implants
• Medical instruments
• Endoscopic equipment
• Radiation therapy and brachytherapy components
• Trays for trauma products
• Biotechnology and laboratory equipment
• Analytical and diagnostic equipment

Trends
In addition to requiring extreme resistance to steam and chemical sterilization, today’s medical device designs need exceptional physical performance that can help deliver the extended product life that value conscious users demand.

Quadrant Answers
Quadrant® PPSU LSG by Quadrant is an exceptionally tough engineering plastic with a temperature of deflection under load of about 205 °C (400˚ F), excellent chemical resistance, dimensional stability and the ability to withstand more than 1,000 cycles of steam sterilization without significant loss of properties. It is highly resistant to cleaning agents, disinfectants and various solvents, as well as to gamma radiation.
Available in Standard Colors

<table>
<thead>
<tr>
<th>Color</th>
<th>black</th>
<th>natural (off-white)</th>
<th>blue</th>
<th>green</th>
<th>yellow</th>
<th>grey</th>
<th>brown</th>
<th>rust-colored</th>
<th>red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Code</td>
<td>BK 937</td>
<td>NT 15</td>
<td>BU 1027</td>
<td>GN 1140</td>
<td>YL 130</td>
<td>GY 1037</td>
<td>BN 1164</td>
<td>RD 1510</td>
<td>RD 1530</td>
</tr>
</tbody>
</table>

Available in a broad range of rod and plate sizes. Contact us for rod diameters and plate sizes.

Properties of Quadrant® PPSU LSG by Quadrant

- Superior resistance to common sterilization techniques compared to other engineering plastics
- Extremely high resistance to repeated steam sterilization
- High resistance to gamma radiation
- Proven biocompatibility per ISO 10993-5 on stock shapes
- Excellent dimensional stability
- Very high impact strength
- Excellent machinability
- Lot traceability

Quadrant produces machinable advanced engineering materials such as Ketron® PEEK, Quadrant® PPSU, Duratron® PEI and PSU as rod, plate or tube and manufactures finished parts from its full range of materials. This broad product range and knowledgeable application development team can support your use of our pre-certified, biocompatible Life Science Grades, as well as implantable grade PE-UHMW (CHIRULEN® and EXTRULEN®).

All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant Engineering Plastic Products does not guarantee the accuracy or completeness of this information and it is the customer’s responsibility to determine the suitability of Quadrant’s products in any given application.

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