

INTAMSYS[®] PPSU

INTAMSYS® PPSU is an amorphous high performance thermoplastic, **P**olyPhenyl**SU**Ifone, which offers good impact resistance and chemical resistance. PPSU can operate in temperatures up to 180°C. PPSU has superior hydrolysis resistance when compared to other amorphous thermoplastics as measured by steam autoclaving cycles, it has virtually unlimited steam sterilizability. It also resists common acids and bases over a broad temperature range. Applications are: Aerospace, Aircraft, Automotive, Dental, Medical, Surgical instruments. The PPSU meets the ISO10993 for medical applications and meets the European regulations EC No. 1935/2004, EC No. 2023/2006 and EC No. 10/2011 concerning plastic materials and articles coming into contact with food and is also compliant with the FDA (Food and Drug Administration) for food contact.

| PHYSICAL PROPERTIES | TEST METHOD | UNITS | TYPICAL VALUE |
|------------------------------|--------------------|-------------------|--------------------|
| Density | ISO 1183 | g/cm ³ | 1.29 |
| Glass transition temperature | DSC, 10°C /min | °C | 220 |
| Heat Deflection Temperature | ISO 75 | °C | 198 |
| Moisture content | ISO 62, saturation | % | 1.2 |
| Odor | - | - | Almost odorless |
| Solubility | - | - | Insoluble in water |

| MECHANICAL PROPERTIES | TEST METHOD | UNITS | TYPICAL VALUE |
|-----------------------|-------------|-------|---------------|
| Tensile strength | ISO 527 | MPa | 74.1 |
| Elongation at break | ISO 527 | % | 8.0 |

Disclaimer

The typical values presented in this document are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts properties can be impact by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of INTAMSYS materials for the intended application. INTAMSYS makes no warranty of any kind, unless announced separately, to the fitness for any particular use or application. INTAMSYS shall not be made liable for any damage, injury or loss induced from the use of INTAMSYS materials in any particular application.