

## Technical Data Sheet

### Schulatec PPS TFF 5040 N1 NAT



Polyphenylene Sulfide

#### Product Description

40% glass fibre reinforced PPS compound with low wear properties

**Processing Method**      Injection Molding

| Typical Properties                                                | Nominal Value | Units                   | Test Method    |
|-------------------------------------------------------------------|---------------|-------------------------|----------------|
| <b>Physical</b>                                                   |               |                         |                |
| Melt Volume Flow Rate, (300 °C/5.0 kg)                            | 24            | cm <sup>3</sup> /10 min | ISO 1133       |
| Density, (Method A)                                               | 1.69          | g/cm <sup>3</sup>       | ISO 1183       |
| <b>Mechanical</b>                                                 |               |                         |                |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                      | 1.5           | %                       | ISO 527-2      |
| Flexural Modulus                                                  | 15100         | MPa                     | ISO 178        |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                      | 155           | MPa                     | ISO 527-2      |
| Tensile Modulus, (1 mm/min, Type 1A)                              | 14400         | MPa                     | ISO 527-1      |
| Flexural Stress                                                   | 280           | MPa                     | ISO 178        |
| <b>Impact</b>                                                     |               |                         |                |
| Charpy Impact Strength - Notched, (Type 1, Edgewise, Notch A)     | 8.5           | kJ/m <sup>2</sup>       | ISO 179        |
| Charpy Impact Strength - Unnotched                                | 38            | kJ/m <sup>2</sup>       | ISO 179-1/1eU  |
| <b>Thermal</b>                                                    |               |                         |                |
| Deflection Temperature Under Load Annealed (1.80 MPa), (Flatwise) | 265           | °C                      | ISO 75-2/A     |
| <b>Electrical</b>                                                 |               |                         |                |
| Comparative Tracking Index (CTI)                                  | 175           | V                       | IEC 60112      |
| <b>Flammable</b>                                                  |               |                         |                |
| Burning Rate                                                      |               |                         |                |
| (2.00 mm)                                                         | 0.0           | mm/min                  | FMVSS 302      |
| (2.00 mm)                                                         | 0.0           | mm/min                  | ISO 3795       |
| Glow Wire Flammability Index, (1.5 mm)                            | 960           | °C                      | IEC 60695-2-12 |
| Glow Wire Ignition Temperature, (1.5 sec)                         | 850           | °C                      | IEC 60695-2-13 |
| <b>UL Information</b>                                             |               |                         |                |
| Flame Rating, (1.5 mm)                                            | V-0           |                         | UL 94          |

| Injection Parameters                | Nominal Value | Units |
|-------------------------------------|---------------|-------|
| Drying Time                         | 3.0 to 4.0    | hr    |
| Drying Temperature, (Dry Air Dryer) | 130 to 140    | °C    |
| Screw Speed                         | 40 to 100     | rpm   |
| Processing (Melt) Temp              | 300 to 330    | °C    |
| Mold Temperature                    | 135 to 145    | °C    |