**Technical Data Sheet**

# *Schulatec* PPS E FS

Polyphenylene Sulfide
LyondellBasell Industries
Engineering Plastics

| Product Description |
|---|
| PPS unreinforced, impact-modified, with high melt viscosity for extrusion application |

| General | |
|---|---|
| Processing Method | • Extrusion |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density | 1.17 g/cm³ | 1.17 g/cm³ | ISO 1183/A |
| Melt Volume-Flow Rate (MVR) [1] | 10 cm³/10min | 10 cm³/10min | ISO 1133 |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Modulus | 160000 psi | 1100 MPa | ISO 527-1/1A/1 |
| Tensile Stress (Yield) | 5080 psi | 35.0 MPa | ISO 527-2/1A/50 |
| Tensile Strain (Yield) | 85 % | 85 % | ISO 527-2/1A/50 |
| Flexural Modulus | 189000 psi | 1300 MPa | ISO 178 |
| Flexural Stress (3.5% Strain) | 5080 psi | 35.0 MPa | ISO 178 |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Charpy Notched Impact Strength | 29 ft·lb/in² | 60 kJ/m² | ISO 179/1eA |
| Charpy Unnotched Impact Strength | No Break | No Break | ISO 179/1eU |
| **Hardness** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Shore Hardness | | | ISO 868 |
| Shore A, 10 Sec | 95 | 95 | |
| Shore D, 10 Sec | 70 | 70 | |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | |
| 66 Psi (0.45 Mpa), Unannealed | 230 °F | 110 °C | ISO 75-2/B |
| 264 Psi (1.8 Mpa), Annealed | 203 °F | 95.0 °C | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 266 °F | 130 °C | ISO 306/B50 |
| -- | 491 °F | 255 °C | ISO 306/A50 |
| Melting Temperature (DSC) | 536 °F | 280 °C | DSC |
| **Electrical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Comparative Tracking Index (Solution A) | 175 V | 175 V | IEC 60112 |
| **Flammability** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Burning Rate | | | |
| 0.0787 In (2.00 Mm) | 1.5 in/min | 38 mm/min | ISO 3795 |
| 0.0787 In (2.00 Mm) | 1.5 in/min | 38 mm/min | FMVSS 302 |
| Flame Rating | | | UL 94 |
| 0.030 In (0.75 Mm) | HB | HB | |
| 0.06 In (1.5 Mm) | HB | HB | |
| 0.12 In (3.0 Mm) | HB | HB | |
| Glow Wire Flammability Index | | | IEC 60695-2-12 |
| 0.030 In (0.75 Mm) | 1290 °F | 700 °C | |
| 0.06 In (1.5 Mm) | 1290 °F | 700 °C | |
| 0.12 In (3.0 Mm) | 1290 °F | 700 °C | |

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| Flammability | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Glow Wire Ignition Temperature | | | IEC 60695-2-13 |
| 0.030 In (0.75 Mm) | 1340 °F | 725 °C | |
| 0.06 In (1.5 Mm) | 1340 °F | 725 °C | |
| 0.12 In (3.0 Mm) | 1340 °F | 725 °C | |

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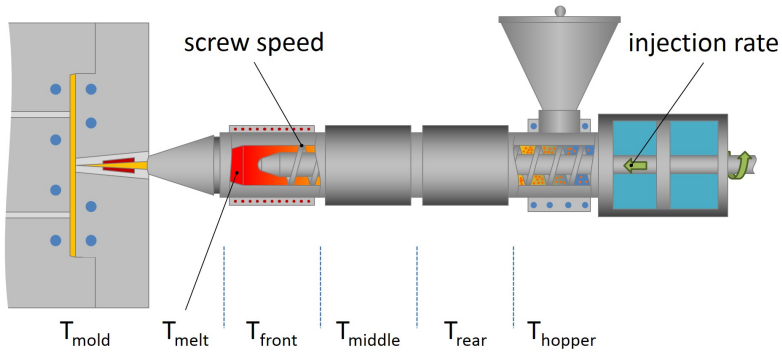


| Injection | Nominal Value (English) | Nominal Value (SI) |
|---|---|---|
| Drying Temperature - Dry Air Dryer | 275 to 284 °F | 135 to 140 °C |
| Drying Time | 3.0 to 4.0 hr | 3.0 to 4.0 hr |
| Processing (Melt) Temp | 545 to 563 °F | 285 to 295 °C |

**Notes**

[1] 2000 V/sec

[2] Self-Extinguishing

**Notes**

These are typical property values not to be construed as specification limits.