

FORTRON® FX515T1

Polyphenylene sulfide

Fortron® FX515T1 is a 15% glass filled, impact modified PPS grade with good impact resistance suitable for injection molding and food contact applications

Product information

| | | |
|----------------------|------------|-----------|
| Resin Identification | PPS-GF15 | ISO 1043 |
| Part Marking Code | >PPS-GF15< | ISO 11469 |

Rheological properties

| | | |
|------------------------------|-------|-----------------|
| Moulding shrinkage, parallel | 0.6 % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 0.3 % | ISO 294-4, 2577 |

Typical mechanical properties

| | | |
|---------------------------------------|----------------------|--------------|
| Tensile modulus | 6000 MPa | ISO 527-1/-2 |
| Tensile stress at break, 5mm/min | 100 MPa | ISO 527-1/-2 |
| Tensile strain at break, 5mm/min | 2.1 % | ISO 527-1/-2 |
| Flexural modulus | 5800 MPa | ISO 178 |
| Flexural strength | 150 MPa | ISO 178 |
| Flexural strain at failure | 3.1 % | ISO 178 |
| Charpy impact strength, 23 °C | 40 kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23 °C | 10 kJ/m ² | ISO 179/1eA |
| Poisson's ratio | 0.35 ^[C] | |

[C]: Calculated

Thermal properties

| | | |
|---|--------|-------------|
| Temperature of deflection under load, 1.8 MPa | 220 °C | ISO 75-1/-2 |
|---|--------|-------------|

Physical/Other properties

| | | |
|---------|------------------------|----------|
| Density | 1370 kg/m ³ | ISO 1183 |
|---------|------------------------|----------|

Injection

| | |
|---------------------------------|---------------|
| Drying Recommended | yes |
| Drying Temperature | 130 °C |
| Drying Time, Dehumidified Dryer | 2 - 4 h |
| Processing Moisture Content | ≤0.02 % |
| Melt Temperature Optimum | 330 °C |
| Min. melt temperature | 310 °C |
| Max. melt temperature | 340 °C |
| Screw tangential speed | 0.2 - 0.3 m/s |
| Mold Temperature Optimum | 120 °C |
| Min. mould temperature | 80 °C |
| Max. mould temperature | 160 °C |
| Hold pressure range | 30 - 70 MPa |
| Back pressure | 3.5 MPa |
| Ejection temperature | 196 °C |

FORTRON® FX515T1

Polyphenylene sulfide

Characteristics

| | |
|-------------------------|--------------------------------|
| Processing | Injection Moulding, Extrusion |
| Special characteristics | High impact or impact modified |

Additional information

Processing Notes

Pre-Drying

Fortron should be pre-dried. Because of the necessary low maximum residual moisture content, the use of dry air dryers is recommended. The dew point should be ≤ -30 deg C. the time between drying and processing should be as short as possible. Normal drying time is 3-4 hrs at 121 deg C but for drying overnight temp should be reduced to 90 deg C.

Automotive

OEM
Renault

ADDITIONAL INFORMATION
UB02b, No Spec, Special Part Approval, See
Your CE Account Manager.