



FORTRON® 0203

Polyphenylene sulfide

A very easy flowing unfilled grade. This grade demonstrates excellent chemical resistance and thermal stability. Intended for extrusion applications that do not require high melt strength and for compounding with various fillers. Available as Fortron 0203B6 (granular powder), and 0203P6 (pellets)

| | | • | |
|-------|--------|------|------|
| Produ | ct int | orma | tion |

| Resin Identification Part Marking Code | PPS >PPS< | | ISO 1043 ISO 11469 |
|---|-------------------------------|------------------------|---|
| Typical mechanical properties | | | |
| Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Flexural strength Compressive modulus Izod notched impact strength, 23°C Izod impact strength, 23°C Hardness, Rockwell, M-scale Poisson's ratio [C]: Calculated | 1 3900 140 4100 2 | MPa % MPa MPa | ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 604 ISO 180/1A ISO 180/1U ISO 2039-2 |
| Thermal properties | | | |
| Melting temperature, 10°C/min Glass transition temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 8 MPa Coefficient of linear thermal expansion (CLTE), parallel Coefficient of linear thermal expansion (CLTE), normal Specific heat capacity of melt | 120 95 55 53 | °C | ISO 11357-1/-3 ISO 11357-1/-3 ISO 75-1/-2 ISO 75-1/-2 ISO 11359-1/-2 ISO 22007-4 |
| Electrical properties | | | |
| Relative permittivity, 1MHz Dissipation factor, 1MHz Volume resistivity Electric strength Comparative tracking index Arc Resistance | 1E9 | E-4 Ohm.m kV/mm | IEC 62631-2-1 IEC 62631-2-1 IEC 62631-3-1 IEC 60243-1 IEC 60112 UL 746B |
| Physical/Other properties | | | |
| Water absorption, 2mm Water absorption, Immersion 24h Density | 0.02 0.01 1400 | | Sim. to ISO 62 Sim. to ISO 62 ISO 1183 |

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Injection

| Drying Recommended | yes | |
|---------------------------------|-----------|-----|
| Drying Temperature | 110 | °C |
| Drying Time, Dehumidified Dryer | 2 - 4 | h |
| Processing Moisture Content | ≤0.02 | % |
| Melt Temperature Optimum | 315 | °C |
| Min. melt temperature | 275 | °C |
| Max. melt temperature | 320 | °C |
| Screw tangential speed | 0.2 - 0.3 | m/s |
| Mold Temperature Optimum | 150 | °C |
| Min. mould temperature | 135 | °C |
| Max. mould temperature | 160 | °C |
| Hold pressure range | 30 - 70 | MPa |
| Back pressure | 3 | MPa |
| Ejection temperature | 230 | °C |

Characteristics

Processing Injection Moulding, Other Extrusion

Delivery form Powder

Special characteristics High Flow, Chemical resistant

Additional information

Processing Notes

Pre-Drying

FORTRON should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be =< - 30° C. The time between drying and processing should be as short as possible.

Storage

For subsequent storage the material should be stored dry in the dryer until processed (<= 60 h).

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