



Fortron® 0203

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

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), 0203P6 (pellets), and 0203C6 (crystallized pellets).

General

| | | | |
|-------------------|--|-----------------------------|--------------------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Chemical Resistant | • Good Flow | • Good Thermal Stability |
| Uses | • Compounding | | |
| RoHS Compliance | • Contact Manufacturer | | |
| Forms | • Pellets | • Powder | |
| Processing Method | • Extrusion | | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-----------------------|----------------|
| Density | 1.35 | g/cm ³ | ISO 1183 |
| Water Absorption (Saturation, 73°F) | 0.020 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 609000 | psi | ISO 527-2/1A |
| Tensile Stress (Break) | 4790 | psi | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 1.0 | % | ISO 527-2/1A/5 |
| Flexural Modulus (73°F) | 566000 | psi | ISO 178 |
| Flexural Stress | 19600 | psi | ISO 178 |
| Compressive Modulus | 595000 | psi | ISO 604 |
| Compressive Stress (6% Strain) | 18900 | psi | ISO 604 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact Strength (73°F) | 0.95 | ft-lb/in ² | ISO 180/1A |
| Unnotched Izod Impact Strength (73°F) | 3.8 | ft-lb/in ² | ISO 180/1U |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (M-Scale) | 100 | | ISO 2039-2 |
| Thermal | Nominal Value | Unit | Test Method |
| Heat Deflection Temperature (264 psi, Unannealed) | 248 | °F | ISO 75-2/A |
| Heat Deflection Temperature (1160 psi, Unannealed) | 203 | °F | ISO 75-2/C |
| Glass Transition Temperature ² | 194 | °F | ISO 11357-2 |
| Melting Temperature ² | 536 | °F | ISO 11357-3 |
| CLTE - Flow | 3.1E-5 | in/in/°F | ISO 11359-2 |
| CLTE - Transverse | 2.9E-5 | in/in/°F | ISO 11359-2 |
| Electrical | Nominal Value | Unit | Test Method |
| Volume Resistivity | 1.0E+11 | ohms·cm | IEC 60093 |
| Electric Strength | 430 | V/mil | IEC 60243-1 |
| Relative Permittivity (1 MHz) | 4.00 | | IEC 60250 |
| Dissipation Factor (1 MHz) | 8.4E-3 | | IEC 60250 |

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| Electrical | Nominal Value | Unit | Test Method |
|--------------------------------|---------------|-----------|-------------|
| Comparative Tracking Index | 100 | V | IEC 60112 |
| Fill Analysis | Nominal Value | Unit | |
| Specific Heat Capacity of Melt | 0.437 | Btu/lb/°F | |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 230 to 248 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min