

Technical Data Sheet

SCHULATEC[®] PP EC 7230 HI black

Polypropylene Copolymer
Engineering Plastics

Product Description

PP electrical conductive, high impact

General

- Processing Method • Injection Molding
- Resin ID (ISO 1043) • PP-HI (GF+NT)

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.11 g/cm ³	1.11 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR)			ISO 1133
230°C/10.0 kg	35 cm ³ /10min	35 cm ³ /10min	
230°C/2.16 kg	0.300 cm ³ /10min	0.300 cm ³ /10min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	798000 psi	5500 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	10200 psi	70.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.8 %	3.8 %	ISO 527-2/1A/5
Flexural Modulus ¹	653000 psi	4500 MPa	ISO 178
Flexural Stress ^{1, 2} (5.0% Strain)	14500 psi	100 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	4.8 ft·lb/in ²	10 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	24 ft·lb/in ²	50 kJ/m ²	
73°F (23°C)	24 ft·lb/in ²	50 kJ/m ²	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 132/10)	15200 psi	105 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	302 °F	150 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	266 °F	130 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	320 °F	160 °C	ISO 306/A50
--	239 °F	115 °C	ISO 306/B50

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	1.0E+3 ohms	1.0E+3 ohms	IEC 60093

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302

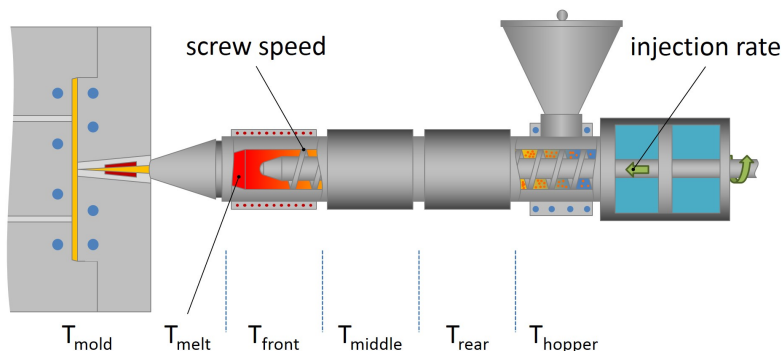
Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	464 to 518 °F	240 to 270 °C
Mold Temperature	104 to 158 °F	40 to 70 °C
Cushion	0.0787 to 0.197 in	2.00 to 5.00 mm
Screw Speed	2.0 ft/sec	36 m/min

Injection Notes

Predrying

In general no predrying, only when moisture on granulate surface predrying at 80°C for 2-3 hours is recommended.

Reprocessing

Up to 100% regrind may be used in which case use of additional stabilisation (e.g. POLYCYCLE[®]) is recommended as a safety precaution. Usual recycle content 10 - 30%.

Shut down

PP can normally be left in the cylinder. It is quiet insensitive to temperature.

Finishing

The material must be pre-treated for printing and gluing by flaming or corona discharge. Otherwise there are some special printing colours or glues.

Remarks

In contact with copper the melt will be degraded. For permanent processing of glass fibre reinforced grades wear resistant screws and cylinders are recommended.