Technical Data Sheet

Schulatec PP EC 1009 HI BLACK

Polypropylene Copolymer
LyondellBasell Industries
Engineering Plastics

Product Description
PP reinforced compound with improved impact resistance. Electrical conductive material fulfilling ESD requirements.

General	
Appearance	• Black
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/cm³	1.11 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR)			ISO 1133
230°c/10.0 Kg	35 cm³/10min	35 cm³/10min	
230°c/2.16 Kg	0.30 cm³/10min	0.30 cm³/10min	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	798000 psi	5500 MPa	ISO 527-1/1A/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/in²	7.0 kJ/m²	
73°f (23°c)	4.8 ft·lb/in²	10 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	24 ft·lb/in²	50 kJ/m²	
73°f (23°c)	24 ft·lb/in²	50 kJ/m²	
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**
Deflection Temperature Under Load			
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			
--	239 °F	115 °C	ISO 306/B50
--	320 °F	160 °C	ISO 306/A50
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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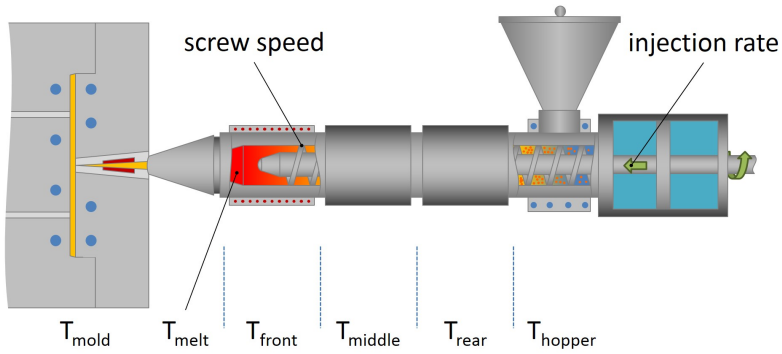

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 3.0 hr	2.0 to 3.0 hr
Processing (Melt) Temp	464 to 518 °F	240 to 270 °C
Mold Temperature	104 to 158 °F	40 to 70 °C
Cushion	0.0787 to 0.197 in	2.00 to 5.00 mm

Injection Notes

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

Reprocessing
Recycled content use possible 10 - 30%. The recacled content from sprues, etc. has be dry, and not mixed with any other materials.

Shut down
PP can normally be left in the cylinder. It is quite insensitive to temperature.

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.