

## SABIC Innovative Plastics NORYL 731 PPE+HIPS (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Polyphenylene Ether/PPO , Polystyrene (PS)

### Material Notes:

NORYL 731 is an unfilled material, with a Vicat B/120 of 140C according ISO 306. NORYL 731 is a general purpose material with good balance of Strength, Impact and Flow. NORYL 731 is available in all colours.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-NORYL-731-PPEHIPS-Europe-Africa-Middle-East.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-NORYL-731-PPEHIPS-Europe-Africa-Middle-East.php)

Physical Properties	Metric	English	Comments
Density	1.06 g/cc	0.0383 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption	0.0600 %	0.0600 %	23 <sup>o</sup> C / 50% RH; ISO 62
Water Absorption at Saturation	0.23 %	0.23 %	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	on Tensile Bar; SABIC Method
Melt Index of Compound	8.0 g/10 min @Load 5.00 kg, Temperature 280 <sup>o</sup> C	8.0 g/10 min @Load 11.0 lb, Temperature 536 <sup>o</sup> F	MVR [cm <sup>3</sup> /10 min]; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, H358/30	100 MPa	14500 psi	ISO 2039-1
Tensile Strength at Break	50.0 MPa	7250 psi	50 mm/min; ISO 527
Tensile Strength, Yield	55.0 MPa	7980 psi	50 mm/min; ISO 527
Elongation at Break	30 %	30 %	50 mm/min; ISO 527
Elongation at Yield	5.0 %	5.0 %	50 mm/min; ISO 527
Tensile Modulus	2.30 GPa	334 ksi	1 mm/min; ISO 527
Flexural Yield Strength	75.0 MPa	10900 psi	2 mm/min; ISO 178
Flexural Modulus	2.20 GPa	319 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	15.0 kJ/m <sup>2</sup>	7.14 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
	5.00 kJ/m <sup>2</sup> @Temperature -30.0 <sup>o</sup> C	2.38 ft-lb/in <sup>2</sup> @Temperature -22.0 <sup>o</sup> F	80*10*4; ISO 180/1A
Charpy Impact, Notched	1.50 J/cm <sup>2</sup>	7.14 ft-lb/in <sup>2</sup>	Edgew 80*10*4 sp=62mm; ISO 179/1eA
	0.500 J/cm <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	

Mechanical Properties	Metric @Temperature -30.0 Â°C	English @Temperature -22.0 Â°F	Comments Edgew 80*10*4 sp=62mm; ISO 75/Be
Taber Abrasion, mg/1000 Cycles	65	65	CS-17, 1 kg; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.0 Âµm/m-Â°C @Temperature 23.0 - 80.0 Â°C	38.9 Âµin/in-Â°F @Temperature 73.4 - 176 Â°F	ISO 11359-2
CTE, linear, Transverse to Flow	70.0 Âµm/m-Â°C @Temperature 23.0 - 80.0 Â°C	38.9 Âµin/in-Â°F @Temperature 73.4 - 176 Â°F	ISO 11359-2
Thermal Conductivity	0.220 W/m-K	1.53 BTU-in/hr-ftÂ²- Â°F	ISO 8302
Hot Ball Pressure Test	<= 133 Â°C	<= 271 Â°F	IEC 60695-10-2
Deflection Temperature at 0.46 MPa (66 psi)	130 Â°C	266 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	115 Â°C	239 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	135 Â°C	275 Â°F	Rate B/50; ISO 306
	140 Â°C	284 Â°F	Rate B/120; ISO 306
	145 Â°C	293 Â°F	Rate A/50; ISO 306
UL RTI, Electrical	105 Â°C	221 Â°F	UL 746B
UL RTI, Mechanical with Impact	90.0 Â°C	194 Â°F	UL 746B
UL RTI, Mechanical without Impact	105 Â°C	221 Â°F	UL 746B
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	UL 94
	HB @Thickness 3.00 mm	HB @Thickness 0.118 in	UL 94
Oxygen Index	22 %	22 %	ISO 4589
Glow Wire Test	750 Â°C @Thickness 3.20 mm	1380 Â°F @Thickness 0.126 in	IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093

Electrical Properties	Metric	English	Comments
<b>Surface Resistance</b>	$1.0 \times 10^{15}$ ohm	$1.0 \times 10^{15}$ ohm	IEC 60093
<b>Dielectric Constant</b>	2.6 @Frequency 1.00e+6 Hz	2.6 @Frequency 1.00e+6 Hz	IEC 60250
	2.7 @Frequency 50.0 - 60.0 Hz	2.7 @Frequency 50.0 - 60.0 Hz	IEC 60250
<b>Dielectric Strength</b>	19.0 kV/mm @Thickness 3.20 mm	483 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
<b>Dissipation Factor</b>	0.0010 @Frequency 1.00e+6 Hz	0.0010 @Frequency 1.00e+6 Hz	IEC 60250
	0.0020 @Frequency 50.0 - 60.0 Hz	0.0020 @Frequency 50.0 - 60.0 Hz	IEC 60250
<b>Comparative Tracking Index</b>	175 V	175 V	IEC 60112

Descriptive Properties	Value	Comments
Ball Pressure Test, 125Å°C +/- 2Å°C	PASSES	IEC 60695-10-2

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China