

# NORYL™ Resin PX1185 - Europe

Polyphenylene Ether + PS

SABIC

PROSPECTOR®

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## Technical Data

### Product Description

NORYL™ PX1185 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This lubricated, impact modified, extrusion grade was developed for automotive trim applications and offers high heat resistance, good impact resistance, low specific gravity, and dimensional stability.

### General

Material Status	• Commercial: Active
Search for UL Yellow Card	• SABIC • NORYL™ Resin
Availability	• Europe
Uses	• Electrical/Electronic Applications • Electronic Displays
RoHS Compliance	• RoHS Compliant

Physical	Nominal Value Unit	Test Method
Density	1.06 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (280°C/10.0 kg)	12 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage - Flow <sup>2</sup>	0.50 to 0.70 %	Internal Method
Water Absorption		ISO 62
Saturation, 23°C	0.19 %	
Equilibrium, 23°C, 50% RH	0.060 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	1500 MPa	ISO 527-2/1
Tensile Stress		ISO 527-2/50
Yield	30.0 MPa	
Break	35.0 MPa	
Tensile Strain		ISO 527-2/50
Yield	2.5 %	
Break	55 %	
Flexural Stress <sup>3,4</sup>	45.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup>		ISO 179/1eA
-30°C	8.0 kJ/m <sup>2</sup>	
23°C	22 kJ/m <sup>2</sup>	
Notched Izod Impact Strength <sup>6</sup>		ISO 180/1A
-30°C	8.0 kJ/m <sup>2</sup>	
23°C	25 kJ/m <sup>2</sup>	

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature <sup>7</sup>		
0.45 MPa, Unannealed, 4.00 mm, 100 mm Span	115 °C	ISO 75-2/Be
1.8 MPa, Unannealed, 4.00 mm, 100 mm Span	105 °C	ISO 75-2/Ae
Vicat Softening Temperature		
--	120 °C	ISO 306/B120
--	110 °C	ISO 306/B50
Ball Pressure Test (73 to 77°C)	Pass	IEC 60695-10-2
CLTE		ISO 11359-2
Flow : 23 to 80°C	7.0E-5 cm/cm/°C	
Transverse : 23 to 80°C	9.0E-5 cm/cm/°C	
Thermal Conductivity	0.22 W/m/K	ISO 8302



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Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+15 ohms·cm	IEC 60093
Relative Permittivity		IEC 60250
50 Hz	2.70	
60 Hz	2.70	
1 MHz	2.60	
Dissipation Factor		IEC 60250
50 Hz	4.0E-4	
60 Hz	4.0E-4	
1 MHz	9.0E-4	

Flammability	Nominal Value Unit	Test Method
Flame Rating (1.6 mm, Testing by SABIC)	HB	UL 94

Injection	Nominal Value Unit
Drying Temperature	80 to 100 °C
Drying Time	2.0 to 3.0 hr
Hopper Temperature	60 to 80 °C
Rear Temperature	240 to 260 °C
Middle Temperature	260 to 280 °C
Front Temperature	280 to 300 °C
Nozzle Temperature	260 to 280 °C
Processing (Melt) Temp	280 to 300 °C
Mold Temperature	60 to 100 °C

## Extrusion Notes

### Profile Extrusion Parameters

- Drying Temperature : 90 to 95 °C
- Drying Time : 2 to 3 hrs
- Melt Temperature : 240 to 260 °C
- Barrel - Zone 1 Temperature : 200 to 220 °C
- Barrel - Zone 2 Temperature : 230 to 250 °C
- Barrel - Zone 3 Temperature : 240 to 260 °C
- Barrel - Zone 4 Temperature : 240 to 260 °C
- Hopper Temperature : 40 to 60 °C
- Adapter Temperature : 240 to 260 °C
- Die Temperature : 240 to 260 °C
- Calibrator Temperature : 50 to 70 °C

## Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Tensile Bar

<sup>3</sup> 2.0 mm/min

<sup>4</sup> at Yield

<sup>5</sup> 80\*10\*4 sp=62mm

<sup>6</sup> 80\*10\*4 mm

<sup>7</sup> 120\*10\*4 mm



**Where to Buy****Supplier****SABIC**

**Web:** <http://www.sabic.com/>

**Distributor****3Polymer (Guangzhou) Chemical Technology Co., Ltd.**

**Telephone:** +86-20-3466-7988

**Web:** <http://3polymer.com>

**Availability:** China

**AECTRA**

**Telephone:** +33-4-72-54-36-42

**Web:** <https://www.aectra.fr/>

**Availability:** Bulgaria, Romania

**AGI-Augusto Guimarães & Irmão**

**Telephone:** +351-22753-7400

**Web:** <https://www.agi.pt/en/>

**Availability:** Portugal

**GRÄSSLIN**

**Telephone:** +49-7721-4040-261

**Web:** <https://www.graesslin-kunststoffe.de>

**Availability:** Germany

**Guzmán Polymers**

**Telephone:** +34-963-992-400

**Web:** <https://www.guzmanglobal.com/en/productos/plastics/>

**Availability:** Italy, Spain, Turkey

**Lenorplastics**

**Telephone:** +41-61-706-11-11

**Web:** <https://www.lenorplastics.ch>

**Availability:** Switzerland

**Plastoplan**

**Telephone:** +43-1-25040-0

**Web:** <https://www.plastoplan.com/>

**Availability:** Austria, Czech Republic, Hungary, Poland, Slovakia

**POLYMIX**

*POLYMIX is a Pan European distribution company. Contact POLYMIX for availability of individual products by country.*

**Telephone:** +33-3-8920-1380

**Web:** <http://www.polymix.eu/>

**Availability:** France

**RESINEX Group**

*RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.*

**Telephone:** +32-14-672511

**Web:** <http://www.resinex.com/>

**Availability:** Europe

**Ultrapolymers**

*Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

**Telephone:** +32-11-57-95-57

**Web:** <http://www.ultrapolymers.com/>

**Availability:** Belgium, Netherlands, South Africa

