

NORYL GTX™ Resin GTX830 - Europe

Polyphenylene Ether + PS + PA

SABIC

PROSPECTOR®

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Technical Data

Product Description

NORYL GTX™ 830 resin is a 30% glass reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade has high stiffness (flexural modulus 8200 MPa), excellent chemical resistance, and high heat resistance. NORYL GTX GTX830 resin is an excellent candidate for a wide variety of applications including automotive under the bonnet applications and water meter housings.

General

Material Status	• Commercial: Active		
UL Yellow Card ¹	• E45329-236571		
Search for UL Yellow Card	• SABIC • NORYL GTX™ Resin		
Availability	• Europe		
Uses	<ul style="list-style-type: none"> • Aerospace Applications • Appliances • Automotive Applications • Automotive Exterior Parts • Automotive Interior Parts • Automotive Under the Hood • Construction Applications 	<ul style="list-style-type: none"> • Electrical/Electronic Applications • Electronic Displays • Industrial Applications • Lawn and Garden Equipment • Lighting Applications • Medical/Healthcare Applications • Military/Defense Applications 	<ul style="list-style-type: none"> • Outdoor Applications • Rail Applications • Recreational Vehicle Applications • Textile Applications • Water Management
RoHS Compliance	• RoHS Compliant		
Also Available In	• Asia Pacific	• Latin America	• North America

Physical	Nominal Value Unit	Test Method
Density	1.32 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (280°C/5.0 kg)	7.0 cm ³ /10min	ISO 1133
Molding Shrinkage		Internal Method
Across Flow : 3.20 mm	0.80 to 1.0 %	
Flow : 3.20 mm	0.20 to 0.30 %	
Water Absorption		ISO 62
Saturation, 23°C	3.1 %	
Equilibrium, 23°C, 50% RH	1.1 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	7300 MPa	ISO 527-1/1
Tensile Stress (Break)	110 MPa	ISO 527-2/5
Tensile Strain (Break)	2.5 %	ISO 527-2/5
Flexural Modulus ³	6200 MPa	ISO 178
Flexural Stress ^{3,4}	170 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/2C
-20°C	7.0 kJ/m ²	
23°C	7.0 kJ/m ²	
Charpy Unnotched Impact Strength ⁵		ISO 179/1eU
-30°C	40 kJ/m ²	
23°C	60 kJ/m ²	
Unnotched Izod Impact Strength ⁶		ISO 180/1U
-30°C	45 kJ/m ²	
23°C	45 kJ/m ²	

Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 358/30)	110 MPa	ISO 2039-1



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Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	220 °C	ISO 306/B120 ISO 306/B50
Ball Pressure Test (123 to 127°C)	Pass	IEC 60695-10-2
CLTE		ISO 11359-2
Flow : 23 to 60°C	2.0E-5 cm/cm/°C	
Transverse : 23 to 60°C	8.0E-5 cm/cm/°C	
Thermal Conductivity	0.26 W/m/K	ISO 8302
RTI Elec ⁷	120 °C	UL 746B
RTI Imp ⁷	90.0 °C	UL 746B
RTI Str ⁷	125 °C	UL 746B

Flammability	Nominal Value Unit	Test Method
Flame Rating ⁷ (> 1.5 mm)	HB	UL 94
Oxygen Index	29 %	ISO 4589-2

Injection	Nominal Value Unit
Drying Temperature	100 to 110 °C
Drying Time	2.0 to 3.0 hr
Suggested Max Moisture	0.070 %
Hopper Temperature	60 to 80 °C
Rear Temperature	260 to 280 °C
Middle Temperature	270 to 290 °C
Front Temperature	280 to 300 °C
Nozzle Temperature	270 to 290 °C
Processing (Melt) Temp	280 to 300 °C
Mold Temperature	80 to 100 °C

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ 2.0 mm/min

⁴ at Break

⁵ 80*10*4 sp=62mm

⁶ 80*10*4 mm

⁷ UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.



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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, Slovakia

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

