

NORYL GTX™ RESIN GTX951W

REGION ASIA

DESCRIPTION

NORYL GTX951W resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high heat resistance, excellent chemical resistance, high melt flow, and added mold release. NORYL GTX951W resin was designed for automotive under-the-hood applications such as power distribution boxes, relay boxes, and junction boxes.

GENERAL INFORMATION

Features

Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, High stiffness/Strength, High temperature resistance, Impact resistant, No PFAS intentionally added

Fillers

Unreinforced

Polymer Types

Polyphenylene Ether + PA (PPE+Nylon)

Processing Techniques

Injection Molding

INDUSTRY

Automotive

Electrical and Electronics

Industrial

SUB INDUSTRY

Automotive Under the Hood

Electronic Components, Lighting

Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES**TYPICAL VALUES****UNITS****TEST METHODS****MECHANICAL ⁽¹⁾**

Tensile Stress, yld, Type I, 50 mm/min

65

MPa

ASTM D638

Tensile Strain, brk, Type I, 50 mm/min

55

%

ASTM D638

Flexural Stress, yld, 2.6 mm/min, 100 mm span

100

MPa

ASTM D790

Flexural Modulus, 2.6 mm/min, 100 mm span

2450

MPa

ASTM D790

IMPACT ⁽¹⁾

Izod Impact, notched, 23°C

211

J/m

ASTM D256

Izod Impact, notched, -30°C

100

J/m

ASTM D256

THERMAL ⁽¹⁾

HDT, 0.45 MPa, 6.4 mm, unannealed

195

°C

ASTM D648

CTE, -40°C to 40°C, flow

9.E-05

1/°C

ASTM E831

CTE, -40°C to 40°C, xflow

8.5E-05

1/°C

ASTM E831

PHYSICAL ⁽¹⁾

Specific Gravity

1.1

-

ASTM D792

Melt Flow Rate, 280°C/2.16 kgf

24

g/10 min

ASTM D1238

Melt Flow Rate, 280°C/5.0 kgf

65

g/10 min

ASTM D1238

ELECTRICAL ⁽¹⁾

Dielectric Strength, in oil, 1.6 mm

22.4

kV/mm

ASTM D149

Dissipation Factor, 1 MHz

0.017

-

ASTM D150

FLAME CHARACTERISTICS ⁽²⁾

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CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Yellow Card Link	<u>E207780-102315341</u>	-	-
UL Recognized, 94HB Flame Class Rating	1.2	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	100 – 120	°C	
Drying Time	2 – 3	Hrs	
Maximum Moisture Content	0.07	%	
Melt Temperature	280 – 310	°C	
Nozzle Temperature	270 – 300	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	80 – 120	°C	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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