

NORYL GTX™ RESIN GTX6009

REGION ASIA

DESCRIPTION

NORYL GTX6009 resin is a non-reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade exhibits high heat resistance, and excellent chemical resistance. NORYL GTX6009 resin may be an excellent candidate for exterior automotive applications such as wheel covers and wheel trim.

GENERAL INFORMATION

Features

Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Creep resistant, 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

SUB INDUSTRY

Automotive Exteriors

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 50 mm/min	53	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	90	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	81	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2130	MPa	ASTM D790
Hardness, Rockwell R	110	-	ASTM D785
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	736	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.8E-05 – 7.9E-05	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Specific Gravity	1.12	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.5	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	1.2 – 1.3	%	SABIC method
ELECTRICAL ⁽¹⁾			
Volume Resistivity	1.E+16	Ω.cm	ASTM D257
INJECTION MOLDING ⁽³⁾			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.07	%	

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Minimum Moisture Content	0.02	%	
Melt Temperature	280 – 305	°C	
Nozzle Temperature	280 – 305	°C	
Front - Zone 3 Temperature	275 – 305	°C	
Middle - Zone 2 Temperature	270 – 305	°C	
Rear - Zone 1 Temperature	265 – 305	°C	
Mold Temperature	75 – 120	°C	
Back Pressure	0.3 – 1.4	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 50	%	
Vent Depth	0.013 – 0.038	mm	

- (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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.