NORYL GTX™ RESIN GTX6009

REGION ASIA

DESCRIPTION

NORYL GT6009 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	SUB INDUSTRY
Automotive	Automotive Exteriors

TYPICAL PROPERTY VALUES

Revision 20241015

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	%	

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