NORYL GTX™ RESIN GTX6011

REGION ASIA

DESCRIPTION

NORYL GTX6011 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 GTX6011 resin may be an excellent candidate for Automotive exterior and industrial applications.

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	SUB INDUSTRY
Automotive	Automotive Exteriors

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	45	MPa	SABIC - Japan Method
Tensile Strain, break	150	%	SABIC - Japan Method
Flexural Stress	74	MPa	ASTM D790
Flexural Modulus	1860	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched, 23°C	843	J/m	ASTM D256
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	180	°C	ASTM D648
CTE, -30°C to 30°C	0.00008 – 0.0001	1/°C	TMA
PHYSICAL [1]			
Specific Gravity	1.07	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.6	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm [2]	1.1 – 1.3	%	SABIC method
INJECTION MOLDING [3]			
Drying Temperature	140	°C	
Drying Time	3 – 4	Hrs	
Melt Temperature	280 – 310	°C	
Nozzle Temperature	280 – 310	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	80 – 120	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Screw Speed	30 – 80	rpm	
Back Pressure	0.5 – 1.5	MPa	

(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.

DISCLAIMER