

NORYL GTX™ RESIN GTX6801

REGION ASIA

DESCRIPTION

NORYL GTX6801 resin is a 30% glass fiber reinforced alloy of Polyphenylene Ether (PPE) + Polyamide (PA). This injection moldable grade has high stiffness (flexural modulus 8430MPa), excellent chemical resistance, and high heat resistance. NORYL GTX6801 resin is an excellent candidate for industrial applications.

GENERAL INFORMATION	
Features	Chemical Resistance, Hydrolytic Stability, Low Warpage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyphenylene Ether + PA (PPE+Nylon)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	157	MPa	SABIC - Japan Method
Tensile Strain, break	10	%	SABIC - Japan Method
Flexural Stress	216	MPa	ASTM D790
Flexural Modulus	8430	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	88	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 6.4 mm, unannealed	230	°C	ASTM D648
CTE, -30°C to 30°C	0.00003 – 0.00005	1/°C	TMA
PHYSICAL ⁽¹⁾			
Specific Gravity	1.33	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.5	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.3 – 0.7	%	SABIC method
Melt Flow Rate, 280°C/5.0 kgf	24.2	g/10 min	ASTM D1238
INJECTION MOLDING ⁽³⁾			
Drying Temperature	140	°C	
Drying Time	2 – 4	Hrs	
Melt Temperature	275 – 290	°C	
Nozzle Temperature	275 – 290	°C	
Front - Zone 3 Temperature	275 – 290	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	265 – 280	°C	
Rear - Zone 1 Temperature	260 – 270	°C	
Mold Temperature	80 – 120	°C	
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.

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