

NORYL GTX™ GTX4610 resin

Polyphenylene Ether + PS + Nylon

SABIC Innovative Plastics

Message:

NORYL GTX GTX4610 resin is a high performance, 10% glass filled blend of PPE/PA that exhibits an excellent balance of non-halogenated flame retardance, dimensional stability, high heat resistance, strength, and flow. The material is available in limited colors for injection molding.

General Information			
UL YellowCard	E121562-100033074	E121562-100731737	
Filler / Reinforcement	Glass fiber reinforced material, 10% filler by weight		
Features	Good dimensional stability		
	High strength		
	High liquidity		
	Heat resistance, high		
	Halogen-free		
	Flame retardancy		
Appearance	Available colors		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.21	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/5.0 kg)	18	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/5.0 kg)	15.0	cm³/10min	ISO 1133
Molding Shrinkage			Internal method
Flow: 3.20mm	0.88 - 0.94	%	Internal method
Transverse flow: 3.20mm	0.95 - 1.0	%	Internal method
Water Absorption			ISO 62
Saturated, 23°C	3.8	%	ISO 62
Equilibrium, 23°C, 50% RH	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	5000	MPa	ASTM D638
--	5000	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	88.0	MPa	ASTM D638
Yield	88.0	MPa	ISO 527-2/5
Fracture ³	88.0	MPa	ASTM D638
Fracture	88.0	MPa	ISO 527-2/5
Tensile Strain			ISO 527-2/5
Yield	3.0	%	ISO 527-2/5

Fracture	3.0	%	ISO 527-2/5
Flexural Modulus			
50.0mm span ⁴	4600	MPa	ASTM D790
-- ⁵	4600	MPa	ISO 178
Flexural Stress			
--	145	MPa	ISO 178
Yield, 50.0mm span ⁶	145	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁷ (23°C)	5.0	kJ/m ²	ISO 179/1eA
Notched Izod Impact			
-30°C	65	J/m	ASTM D256
23°C	80	J/m	ASTM D256
23°C ⁸	5.0	kJ/m ²	ISO 180/1A
Instrumented Dart Impact (23°C, Total Energy)	12.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	220	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span ⁹	224	°C	ISO 75-2/Bf
Vicat Softening Temperature			
--	218	°C	ASTM D1525, ISO 306/B50 11 ¹⁰
--	220	°C	ISO 306/B120
Linear thermal expansion coefficient			
Flow: -40 to 40°C	4.1E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Lateral: -40 to 40°C	7.4E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength			
1.60 mm, in Air	23	kV/mm	ASTM D149
1.60 mm, in Oil	24	kV/mm	ASTM D149
Comparative Tracking Index (CTI)	PLC 1		UL 746
Comparative Tracking Index	425	V	IEC 60112
High Amp Arc Ignition (HAI)	PLC 0		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			
0.800 mm, Testing by SABIC	V-1		UL 94
	5VB		
2.00 mm, Testing by SABIC	5VA		UL 94
Glow Wire Flammability Index (2.00 mm)	960	°C	IEC 60695-2-12

Glow Wire Ignition Temperature (1.00 mm)	825	°C	IEC 60695-2-13
Injection	Nominal Value	Unit	
Drying Temperature	93.3 - 107	°C	
Drying Time	3.0 - 4.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Max Moisture	0.070	%	
Suggested Shot Size	30 - 50	%	
Rear Temperature	266 - 304	°C	
Middle Temperature	271 - 304	°C	
Front Temperature	277 - 304	°C	
Nozzle Temperature	282 - 304	°C	
Processing (Melt) Temp	282 - 304	°C	
Mold Temperature	76.7 - 121	°C	
Back Pressure	0.345 - 1.38	MPa	
Screw Speed	20 - 100	rpm	
Vent Depth	0.013 - 0.038	mm	
Injection instructions			
Minimum Moisture Content: 0.02 %			
NOTE			
1.	5.0 mm/min		
2.	Type 1, 5.0 mm/min		
3.	Type 1, 5.0 mm/min		
4.	1.3 mm/min		
5.	2.0 mm/min		
6.	1.3 mm/min		
7.	80*10*4 sp=62mm		
8.	80*10*4		
9.	80*10*4 mm		
10.	标准 B (120°C/h), 载荷2 (50N)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT