

**Product Texts**

NORYL™ GFN2 resin is a 20% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This general-purpose injection moldable grade exhibits very low moisture absorption, high strength, hydrolytic stability, Low warpage, low specific gravity, and dimensional stability. NORYL GFN2 carries a UL746C outdoor suitability rating of F1 and is an excellent candidate for a variety of indoor and outdoor applications including construction, electrical components + displays, lawn and garden equipment. \*See NORYL GFN2F resin for FDA food compliant / NSF version.

UL Yellow Card Link [E45587-237020](https://www.ul.com/yellow-card/E45587-237020)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	2	cm <sup>3</sup> /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	11.7	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	6000	MPa	ISO 527
Yield stress	90	MPa	ISO 527
Strain at break	3	%	ISO 527
Flexural modulus	5400	MPa	ISO 178
Charpy notched impact strength, +23°C	8	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C, 4mm	30	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	10	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	9	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	6500	MPa	ASTM D 638
Tensile Strength at Yield	100	MPa	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Izod Impact notched, 1/8 in	88	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	550	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	135	°C	ISO 75-1/-2
Vicat softening temperature, B	140	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	147	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	137	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.04	%	Sim. to ISO 62
Density	1230	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110 - 120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	300 - 325	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	265 - 315	°C	-
Zone 2	275 - 320	°C	-
Zone 3	290 - 325	°C	-

**NORYL™ Resin GFN2 - Asia**

(PPE+PS)-GF20

Saudi Basic Industries Corporation (SABIC)

Screw speed	<b>20 - 100</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Applications**

Automotive

**Chemical Resistance**

Hydrolytically Stable

**Regional Availability**

Asia Pacific

**Certifications**

Food contact, Food approval FDA 21 CFR