

**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 [E121562-221161](https://www.ul.com/yellow-card/E121562-221161)

**Processing/Physical Characteristics**

	Value	Unit	Test Standard
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<b>ISO Data</b>			
Melt volume-flow rate, MVR	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	9	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

**Mechanical properties**

	Value	Unit	Test Standard
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<b>ISO Data</b>			
Tensile Modulus	7070	MPa	ISO 527
Stress at break	97	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Flexural modulus	6540	MPa	ISO 178
Izod notched impact strength, +23°C, 4mm	11	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	6200	MPa	ASTM D 638
Tensile Strength at Break	90	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	5800	MPa	ASTM D 790
Rockwell Hardness	L106	-	ASTM D 785
Izod Impact notched, 1/8 in	119	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	96	J/m	ASTM D 256
Temperature	-40	°C	-
Izod Impact unnotched, 1/8 in	650	J/m	ASTM D 256

**Thermal properties**

	Value	Unit	Test Standard
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<b>ISO Data</b>			
Vicat softening temperature, B	143	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	146	°C	ISO 306
Coeff. of linear therm. expansion -40°C to +100°C, parallel	3.3E-5	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion -40°C to +100°C, normal	9.0E-5	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
<b>ASTM Data</b>			
DTUL @ 66 psi	140	°C	ASTM D 648
DTUL @ 264 psi	135	°C	ASTM D 648

**Electrical properties**

	Value	Unit	Test Standard
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<b>ASTM Data</b>			
Dielectric Strength, Short Time	16.5	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.0008	-	ASTM D 150
Dielectric Constant, 60 Hz	2.86	-	ASTM D 150

**Other properties**

	Value	Unit	Test Standard
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Density	1200	kg/m <sup>3</sup>	ASTM D 792
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**NORYL™ Resin GFN2 - Americas**

(PPE+PS)-GF20

Saudi Basic Industries Corporation (SABIC)

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

North America

**Certifications**

Food contact, Food approval FDA 21 CFR