

Product Texts

NORYL™ GFN2F resin is a 20% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade exhibits very low moisture absorption, high strength, hydrolytic stability, Low warpage, low specific gravity, and dimensional stability. NORYL GFN2F carries a UL746C outdoor suitability rating of F1 along with FDA food contact compliance and NSF 61 listings in several colors. The properties of this material makes it an excellent candidate for water management applications such as water filter and meter components, pump housings / impellers, shower + faucet, and valves.*See NORYL GFN2 resin for NON FDA / NSF version.

UL Yellow Card Link [E121562-221161](https://www.ul.com/yellowcard/E121562-221161)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	8	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	9	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-
Mechanical properties			
ISO Data			
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 ²	ISO 180/1A
ASTM Data			
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			
ISO Data			
Vicat softening temperature, B	143	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	146	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
ASTM Data			
DTUL @ 66 psi	140	°C	ASTM D 648
DTUL @ 264 psi	135	°C	ASTM D 648
Electrical properties			
ASTM Data			
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			
Density	1200	kg/m ³	ASTM D 792

NORYL™ Resin GFN2F - Americas

(PPE+PS)-GF20

Saudi Basic Industries Corporation (SABIC)

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	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Certifications

Food contact, Food approval FDA 21 CFR

Chemical Resistance

Hydrolytically Stable

Regional Availability

North America