

**Product Texts**

NORYL™ GFN1720 resin is a 20% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade was developed for high heat applications and exhibits a good balance of heat resistance, strength, and electrical performance. NORYL GFN1720 resin is an excellent candidate for applications requiring electrically insulating properties, such as ignition coils and bobbins.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	11	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	10	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	4.5	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
Yield strain	2	%	ISO 527
Stress at break	90	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus	4500	MPa	ISO 178
Charpy impact strength, +23°C	25	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	25	kJ/m <sup>2</sup>	ISO 179/1eU
Izod impact strength, +23°C, 4mm	25	kJ/m <sup>2</sup>	ISO 180/1U
Izod impact strength, -30°C, 4mm	25	kJ/m <sup>2</sup>	ISO 180/1U
Ball indentation hardness	100	MPa	ISO 2039-1
<b>ASTM Data</b>			
Tensile Modulus	5500	MPa	ASTM D 638
Tensile Strength at Yield	90	MPa	ASTM D 638
Tensile Strength at Break	90	MPa	ASTM D 638
Elongation at Yield	2.5	%	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	4800	MPa	ASTM D 790
Izod Impact notched, 1/8 in	60	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	50	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, A	180	°C	ISO 306
Vicat softening temperature, B	170	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	180	°C	ISO 306
Thermal Conductivity	0.26	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	3.2	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	171	°C	ASTM D 648
Vicat Temperature	181	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 1MHz	2.6	-	IEC 62631-2-1
Dissipation factor, 1MHz	20	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	30	kV/mm	IEC 60243-1

**NORYL™ Resin GFN1720 - Americas**

(PPE+PS)-GF20

Saudi Basic Industries Corporation (SABIC)

Comparative tracking index	200	-	IEC 60112
----------------------------	-----	---	-----------

Other properties	Value	Unit	Test Standard
Water absorption	0.15	%	Sim. to ISO 62
Humidity absorption	0.06	%	Sim. to ISO 62
Density	1240	kg/m <sup>3</sup>	ISO 1183
Density	1240	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	2 - 4	h	-
Melt temperature	290 - 330	°C	-
Mold temperature	80 - 120	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	270 - 290	°C	-
Zone 2	290 - 310	°C	-
Zone 3	310 - 330	°C	-

**Characteristics****Processing**

Injection Molding

**Regional Availability**

North America