

**Product Texts**

NORYL™ SE1GFN1 resin is a 10% glass reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of V1 at 1.5mm along with UL746C Outdoor Suitability rating of F1 and RTI 110C. NORYL SE1GFN1 exhibits high heat resistance, good dielectric strength, dimensional stability, hydrolytic stability, and very low moisture absorption. This material is an excellent candidate for appliance internals, indoor and outdoor electrical enclosures / housings / connectors.

UL Yellow Card Link [E121562-100072184](https://www.ul.com/yellow-card/E121562-100072184)

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Tensile Strength at Break	<b>74</b>	MPa	ASTM D 638
Elongation at Break	<b>5</b>	%	ASTM D 638
Flexural Modulus	<b>3990</b>	MPa	ASTM D 790
Rockwell Hardness	<b>L104</b>	-	ASTM D 785
Izod Impact notched, 1/8 in	<b>96</b>	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	<b>69</b>	J/m	ASTM D 256
Temperature	<b>-40</b>	°C	-

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Burning behav. at 1.5 mm nom. thickn.	<b>V-1</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5</b>	mm	-
<b>ASTM Data</b>			
Vicat Temperature	<b>147</b>	°C	ASTM D 1525

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Dissipation Factor, 60 Hz	<b>0.0017</b>	-	ASTM D 150
Dissipation Factor, 1 MHz	<b>0.0016</b>	-	ASTM D 150
Dielectric Constant, 60 Hz	<b>3</b>	-	ASTM D 150
Dielectric Constant, 1 MHz	<b>3</b>	-	ASTM D 150
Volume Resistivity	<b>1E15</b>	Ohm*cm	ASTM D 257

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1160</b>	kg/m³	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>105 - 110</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.02</b>	%	-
Melt temperature	<b>280 - 310</b>	°C	-
Mold temperature	<b>75 - 105</b>	°C	-
Zone 1	<b>250 - 300</b>	°C	-
Zone 2	<b>260 - 305</b>	°C	-
Zone 3	<b>270 - 310</b>	°C	-
Screw speed	<b>20 - 100</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

Hydrolytically Stable

**Additives**

Flame retarding agent

**Applications**

Automotive

## **NORYL™ Resin SE1GFN1 - Americas**

(PPE+PS)-GF10

Saudi Basic Industries Corporation (SABIC)

### **Special Characteristics**

Flame retardant

### **Regional Availability**

North America