

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 [E45587-101825569](https://www.ul.com/yellow-card/E45587-101825569)

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

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.5	mm	-
ASTM Data			
Vicat Temperature	147	°C	ASTM D 1525

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

Other properties	Value	Unit	Test Standard
Density	1160	kg/m ³	ASTM D 792

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

Characteristics

Processing

Injection Molding

Chemical Resistance

Hydrolytically Stable

NORYL™ Resin SE1GFN1 - Asia
(PPE+PS)-GF10

Saudi Basic Industries Corporation (SABIC)

Additives

Flame retarding agent

Applications

Automotive

Special Characteristics

Flame retardant

Regional Availability

Asia Pacific