

Product Texts

NORYL™ N225X resin is a non-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 5VA at 3mm and V0 at 1.5mm along with a UL746C Outdoor Suitability rating of F1. NORYL N225X resin offers good dielectric strength and strong electrical performance in addition to low moisture absorption and dimensional stability, This material is an excellent candidate for both indoor and outdoor electrical applications.

UL Yellow Card Link [E121562-221178](https://www.ul.com/yellow-card/E121562-221178)

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	66	MPa	ASTM D 638
Tensile Strength at Break	49	MPa	ASTM D 638
Elongation at Yield	8	%	ASTM D 638
Elongation at Break	17	%	ASTM D 638
Izod Impact notched, 1/8 in	186	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	96	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-
ASTM Data			
Vicat Temperature	128	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	16.2	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.01	-	ASTM D 150
Dissipation Factor, 1 MHz	0.007	-	ASTM D 150
Dielectric Constant, 60 Hz	2.69	-	ASTM D 150
Dielectric Constant, 1 MHz	2.55	-	ASTM D 150
Surface Resistivity	1E14	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1110	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	95 - 100	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	260 - 290	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	225 - 275	°C	-
Zone 2	240 - 280	°C	-
Zone 3	250 - 290	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

NORYL™ Resin N225X - Americas

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Processing

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Applications

Automotive

Regional Availability

North America