

Product Texts

NORYL™ N110 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This impact modified, injection moldable grade was developed for automotive body panel applications and meets the requirements of the Standard ECE Dashboard Impact Test. NORYL N110 resin offers heat resistance, good impact resistance, low specific gravity, and dimensional stability. It is an excellent candidate for a variety of automotive instrument panel applications.

UL Yellow Card Link [E45329-236761](https://www.ul.com/yellow-card/E45329-236761)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	3.8	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2200	MPa	ISO 527
Yield stress	45	MPa	ISO 527
Yield strain	3	%	ISO 527
Stress at break	40	MPa	ISO 527
Strain at break	30	%	ISO 527
Flexural modulus	2000	MPa	ISO 178
Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	11	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	5	kJ/m ²	ISO 180/1A
Ball indentation hardness	95	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	120	°C	ISO 306
Vicat softening temperature, B	115	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	115	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Thermal Conductivity	0.22	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	3.2	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.6	-	IEC 62631-2-1
Dissipation factor, 1MHz	10	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2

Other properties	Value	Unit	Test Standard
Water absorption	0.2	%	Sim. to ISO 62
Humidity absorption	0.07	%	Sim. to ISO 62
Density	1050	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 100	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	280 - 300	°C	-
Mold temperature	60 - 100	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	240 - 260	°C	-

NORYL™ Resin N110 - Europe

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Zone 2	260 - 280	°C	-
Zone 3	280 - 300	°C	-

Characteristics**Processing**

Injection Molding

Applications

Automotive

Special Characteristics

High impact or impact modified

Regional Availability

Europe