

Product Texts

NORYL™ N1150 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 2.5mm and V0 at 0.75mm. NORYL N1150 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 [E121562-101091268](https://www.ul.com/yellow-card/E121562-101091268)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	15	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2650	MPa	ISO 527
Yield stress	72	MPa	ISO 527
Yield strain	3.5	%	ISO 527
Stress at break	52	MPa	ISO 527
Strain at break	7	%	ISO 527
Flexural modulus	2600	MPa	ISO 178
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	6	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	4	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2700	MPa	ASTM D 638
Tensile Strength at Yield	75	MPa	ASTM D 638
Tensile Strength at Break	55	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	8	%	ASTM D 638
Flexural Modulus	3050	MPa	ASTM D 790
Izod Impact notched, 1/8 in	85	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	65	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	109	°C	ISO 75-1/-2
Vicat softening temperature, B	130	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	132	°C	ISO 306
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.5	mm	-
ASTM Data			
DTUL @ 264 psi	108	°C	ASTM D 648
Vicat Temperature	130	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.07	%	Sim. to ISO 62
Density	1110	kg/m ³	ISO 1183
Density	1110	kg/m ³	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

Processing

Injection Molding

Applications

Automotive

Additives

Flame retarding agent

Regional Availability

North America

Special Characteristics

Flame retardant