

Product Texts

NORYL™ V0150B resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of V0 at 1.5mm along with a UL746C Outdoor Suitability rating of F1. Exhibits good low temperature impact resistance, damp heat performance, low moisture absorption and good dimensional stability. NORYL V0150B resin is an excellent candidate for parts that are exposed to tough outdoor environments, such as Solar / Photovoltaic (PV) junction boxes and outdoor housings and enclosures.

UL Yellow Card Link [E45329-100146076](https://www.ul.com/yellow-card/E45329-100146076)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	3.5	g/10min	ASTM D 1238
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2500	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	10	%	ISO 527
Flexural modulus	2400	MPa	ISO 178
Charpy notched impact strength, +23°C	14	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	13	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	5	kJ/m ²	ISO 180/1A
Ball indentation hardness	113	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	2500	MPa	ASTM D 638
Tensile Strength at Yield	70	MPa	ASTM D 638
Tensile Strength at Break	60	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	7	%	ASTM D 638
Flexural Modulus	2550	MPa	ASTM D 790
Izod Impact notched, 1/8 in	330	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	180	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	160	°C	ISO 306
Vicat softening temperature, B	145	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	155	°C	ISO 306
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Thermal Conductivity	0.27	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-

NORYL™ Resin V0150B - Europe

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 264 psi	135	°C	ASTM D 648
Vicat Temperature	155	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.7	-	IEC 62631-2-1
Dissipation factor, 1MHz	30	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	250	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	0.18	%	Sim. to ISO 62
Humidity absorption	0.06	%	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	110 - 120	°C	-
Pre-drying - Time	2 - 3	h	-
Melt temperature	300 - 320	°C	-
Mold temperature	100 - 130	°C	-
Feed temperature	80 - 100	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 300	°C	-
Zone 3	300 - 320	°C	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

Europe