

Product Texts

NORYL™ LTA6020 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, 5VB at 2mm, and V0 at 1.5mm. NORYL LTA6020 exhibits good dimensional stability over a wide temperature range, high heat performance, low moisture uptake, and offers long-term aging / retention of mechanical properties. It is an excellent candidate for solar / photovoltaic (PV) junction boxes and outdoor electrical enclosures.

UL Yellow Card Link [E45329-100960629](https://www.ul.com/yellow-card/E45329-100960629)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	4	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2680	MPa	ISO 527
Yield stress	71	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	57	MPa	ISO 527
Strain at break	8	%	ISO 527
Flexural modulus	2600	MPa	ISO 178
Izod notched impact strength, +23°C, 4mm	16	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	8	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Strength at Yield	72	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Izod Impact notched, 1/8 in	220	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	123	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	136	°C	ISO 75-1/-2
Vicat softening temperature, 120°C/h 10N	155	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	144	°C	ISO 306
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	V-1	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
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
GWFI - thickness tested (3)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-

Other properties	Value	Unit	Test Standard
Density	1130	kg/m ³	ISO 1183

Density	1130	kg/m ³	ASTM D 792
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Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	105	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 100	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 300	°C	-
Zone 3	270 - 290	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

Europe