

LEXANT™ COPOLYMER SLX2571T

REGION EUROPE

DESCRIPTION

Transparent weatherable PC copolymer for blowmolding/extrusion.

TYPICAL PROPERTY VALUES

Revision 20241219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	64	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	7.5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	106	%	ASTM D638
Tensile Modulus, 5 mm/min	2400	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	101	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2400	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	63	MPa	ISO 527
Tensile Stress, break, 50 mm/min	63	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	98	%	ISO 527
Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	94	MPa	ISO 178
Flexural Modulus, 2 mm/min	2240	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	848	J/m	ASTM D256
Izod Impact, notched, -30°C	141	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	74	J	ASTM D3763
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	70	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	10	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	75	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	15	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL ⁽¹⁾			
Vicat Softening Temp, Rate B/50	143	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	126	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.02E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.36E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	6.02E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.36E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	143	°C	ISO 306
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	110	°C	UL 746B

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Relative Temp Index, Mech w/impact ⁽²⁾	110	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	110	°C	UL 746B
PHYSICAL ⁽¹⁾			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽³⁾	0.6 – 0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	3	g/10 min	ASTM D1238
Density	1.2	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	2	cm ³ /10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Hot-Wire Ignition (HWI), PLC 1	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥1	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 3	≥1	mm	UL 746A
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	<u>E45329-102354900</u>	-	-
UL Recognized, 94V-0 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 3.0 mm	875	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	850	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.0 mm	850	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	850	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.0 mm	960	°C	IEC 60695-2-12
UV-light, water exposure/immersion	F1	-	UL 746C
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	120	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 300	°C	
Nozzle Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Middle - Zone 2 Temperature	280 – 300	°C	
Rear - Zone 1 Temperature	270 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	80 – 100	°C	
EXTRUSION BLOW MOLDING ⁽⁵⁾			
Drying Temperature	115 – 120	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Minimum Moisture Content	0.01	%	
Melt Temperature (Parison)	265 – 275	°C	
Barrel - Zone 1 Temperature	260 – 275	°C	
Barrel - Zone 2 Temperature	260 – 275	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Barrel - Zone 3 Temperature	260 – 275	°C	
Barrel - Zone 4 Temperature	260 – 275	°C	
Adapter - Zone 5 Temperature	260 – 275	°C	
Head - Zone 6 - Top Temperature	260 – 275	°C	
Head - Zone 7 - Bottom Temperature	260 – 275	°C	
Screw Speed	15 – 50	rpm	
Mold Temperature	65 – 95	°C	
Die Temperature	270 – 280	°C	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article. The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.
- (5) Processing parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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