LEXAN™ COPOLYMER SLX2571T

REGION ASIA

DESCRIPTION

Transparent weatherable PC copolymer for blowmolding/extrusion.

TYPICAL PROPERTY VALUES

Revision 20180905

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	62	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	64	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	7.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	106	%	ASTM D 638
Tensile Modulus, 5 mm/min	2400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	101	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2400	MPa	ASTM D 790
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			
Izod Impact, notched, 23°C	848	J/m	ASTM D 256
Izod Impact, notched, -30°C	141	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	74	J	ASTM D 3763
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	70	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	10	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	75	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	15	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	143	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	126	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.02E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.36E-05	1/°C	ASTM E 831
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/50	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
PHYSICAL			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	1.2	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.6 – 0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	3	g/10 min	ASTM D 1238
Density	1.2	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.35	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	2	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Recognized, 94V-2 Flame Class Rating	1.5	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	3	mm	UL 94
EXTRUSION BLOW MOLDING			
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	
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	

DISCLAIMER