

LEXAN™ RESIN EX7681T

REGION AMERICAS

DESCRIPTION

LEXAN™ EX7681T resin is a highly UV stabilized 10 MFR polycarbonate, MVR of 10. Suitable for co-extrusion / cap layers. Exhibits low plate out and improved outdoor weathering on PC sheets.

TYPICAL PROPERTY VALUES

Revision 20230725

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	70	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5.4	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	88.1	%	ASTM D638
Tensile Modulus, 5 mm/min	2450	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	113	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2580	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	77	J/m	ASTM D256
Izod Impact, notched, -30°C	73	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	72	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	132	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	127	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	116	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.5E-05	1/°C	ASTM E831
Vicat Softening Temp, Rate B/120	135	°C	ISO 306
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.96	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	10.5	g/10 min	ASTM D1238
Density	1.2	g/cm³	ISO 1183
SHEET EXTRUSION			
Drying Temperature	100 – 110	°C	
Drying Time	2 – 3	Hrs	
Melt Temperature	220 – 250	°C	
Barrel - Zone 1 Temperature	240 – 280	°C	
Barrel - Zone 2 Temperature	240 – 280	°C	
Barrel - Zone 3 Temperature	220 – 240	°C	
Barrel - Zone 4 Temperature	220 – 240	°C	
Adapter Temperature	220 – 240	°C	
Die Temperature	245 – 290	°C	
Roll Stack Temp - Top	175 – 180	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Roll Stack Temp - Middle	175 – 180	°C	
Roll Stack Temp - Bottom	175 – 180	°C	
PROFILE EXTRUSION			
Drying Temperature	100 – 110	°C	
Drying Time	2 – 3	Hrs	
Melt Temperature	180 – 200	°C	
Barrel - Zone 1 Temperature	165 – 185	°C	
Barrel - Zone 2 Temperature	170 – 190	°C	
Barrel - Zone 3 Temperature	175 – 195	°C	
Barrel - Zone 4 Temperature	180 – 200	°C	
Hopper Temperature	60 – 80	°C	
Adapter Temperature	170 – 190	°C	
Die Temperature	180 – 200	°C	
Calibrator Temperature	60 – 100	°C	

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