

LEXANTM RESIN EX9332T

REGION AMERICAS

DESCRIPTION

LEXAN[®] EX9332T polycarbonate resin, MVR (300C/1.2kg) 3 cm³/10min, high viscosity, branched, extrusion, flame retardant, mold release, UV stabilized, transparent, translucent and opaque colors. Material typically used in railway applications and building & construction. Multiwall sheet, solid sheet, pipe, profiles

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Taber Abrasion, CS-17, 1 kg	9	mg/1000cy	SABIC method
Tensile Stress, yield, 50 mm/min	65	MPa	ISO 527
Tensile Stress, break, 50 mm/min	70	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	7	%	ISO 527
Tensile Strain, break, 50 mm/min	>70	%	ISO 527
Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	95	MPa	ISO 178
Flexural Modulus, 2 mm/min	2350	MPa	ISO 178
Ball Indentation Hardness, H358/30	95	MPa	ISO 2039-1
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	11	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	11	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	10	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.2	W/m·°C	ISO 8302
CTE, 23°C to 80°C, flow	7.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	155	°C	ISO 306
Vicat Softening Temp, Rate B/120	156	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	148	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	135	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.4 – 0.6	%	SABIC method
Density	1.25	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.32	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	3	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 300°C/2.16 kg	5	cm ³ /10 min	ISO 1133

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D 1003
Haze, 2.54 mm	<0.8	%	ASTM D 1003
Refractive Index	1.586	-	ISO 489
ELECTRICAL			
Volume Resistivity	>1.E+15	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	2.7	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.001	-	IEC 60250
Dissipation Factor, 1 MHz	0.01	-	IEC 60250
Relative Permittivity, 50/60 Hz	2.7	-	IEC 60250
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
Glow Wire Flammability Index 850°C, passes at	1	mm	IEC 60695-2-12
Glow Wire Flammability Index 960°C, passes at	1	mm	IEC 60695-2-12
MULTIWALL SHEET EXTRUSION			
Drying Temperature	120	°C	
Drying Time	2 – 4	hrs	
Barrel - Zone 1 Temperature	260 – 300	°C	
Barrel - Zone 2 Temperature	260 – 290	°C	
Barrel - Zone 3 Temperature	260 – 290	°C	
Hopper Temperature	100 – 120	°C	
Adapter Temperature	240 – 280	°C	
Die Temperature	240 – 300	°C	
Melt Temperature	260 – 300	°C	
Calibrator Temperature	50 – 100	°C	