LEXAN™ VISUALFX™ RESIN FXD9332T

DESCRIPTION

LEXAN FXD9332T is based on Polycarbonate (PC) copolymer resin. It is a flame-retardant and UV stabilized resin suitable for extrusion. This resin is available in a single translucent color and enables a medium fine surface texture when extruded in sheet, pipe and profiles. This flame retardant resin is EN45545 R4 compliant and is targeted for train lighting cover applications (category R4).

GENERAL INFORMATION	
Features	Transparent/Translucent, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Extrusion

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Lighting

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	70	MPa	ISO 527
Tensile Stress, break, 50 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	>50	%	ISO 527
Tensile Modulus, 1 mm/min	2450	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	100	MPa	ISO 178
Flexural Modulus, 2 mm/min	2400	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	100	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	6	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	5	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	5	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	4	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	100	kJ/m²	ISO 179/1eU
THERMAL [1]			
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	136	°C	ISO 306
Vicat Softening Temp, Rate B/120	137	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	131	°C	ISO 75/Be
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	120	°C	ISO 75/Af
PHYSICAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage on Tensile Bar, flow [2]	0.5 – 0.8	%	SABIC method
Density	1.25	g/cm³	ISO 1183
Melt Volume Rate, MVR at 300°C/2.16 kg	7	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS [1]			
Oxygen Index (LOI)	36	%	ISO 4589
Lateral Flame Spread, CFE	>13	kW/m²	ISO 5658-2
Smoke toxicity, CITG (8 min), 50 kW/m2	<- 0.7	-	ISO 5659-2
EXTRUSION [3]			
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	
Adapter Temperature	100 – 120	°C	
Die Temperature	240 – 280	°C	
Melt Temperature	260 – 300	°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) 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.

(3) Processing parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations.

DISCLAIMER