LEXAN™ VISUALFX™ Resin LUX9130C - Americas

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

Lexan* LUX9130C Polycarbonate (PC) resin is a non-filled, injection moldable grade. This non-chlorinated, non-brominated flame retardant PC has an UL-94 V0 rating at 1.5 mm, high flow capability and is UV stabilized providing additional weathering capability. Lexan* LUX9130C is available in clear transparent and tinted color options that is an excellent candidate for a wide variety of applications.

UL Yellow Card Link E121562-101088457

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**17**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
ASTM Data			
Melt Flow Index, MFI	**18**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2300**	MPa	ISO 527
Yield stress	**63**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Stress at break	**57**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2400**	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	**10**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	**9**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	**10**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	**9**	kJ/m²	ISO 180/1A
Ball indentation hardness	**138**	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	**2400**	MPa	ASTM D 638
Tensile Strength at Yield	**67**	MPa	ASTM D 638
Tensile Strength at Break	**54**	MPa	ASTM D 638
Elongation at Yield	**6**	%	ASTM D 638
Elongation at Break	**80**	%	ASTM D 638
Flexural Modulus	**2400**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**100**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**85**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**N**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	**146**	°C	ISO 306
Vicat softening temperature, B	**139**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**140**	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Burning behav. at thickness h	**V-2**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	**850**	°C	IEC 60695-2-13
GWIT - thickness tested (3)	**3**	mm	-
ASTM Data			
DTUL @ 66 psi	**130**	°C	ASTM D 648

DTUL @ 264 psi	**120**	°C	ASTM D 648
Vicat Temperature	**136**	°C	ASTM D 1525

Electrical properties	**Value**	**Unit**	**Test Standard**
ISO Data			
Relative permittivity, 1MHz	**2.7**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**100**	E-4	IEC 62631-2-1
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
Electric strength	**34**	kV/mm	IEC 60243-1

Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.13**	%	Sim. to ISO 62
Humidity absorption	**0.11**	%	Sim. to ISO 62
Density	**1200**	kg/m³	ISO 1183
Density	**1190**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**280 - 305**	°C	-
Mold temperature	**70 - 95**	°C	-
Zone 1	**260 - 280**	°C	-
Zone 2	**270 - 295**	°C	-
Zone 3	**280 - 305**	°C	-
Screw speed	**40 - 70**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant, Transparent

Additives
Flame retarding agent

Regional Availability
North America