LNP™ ELCRES™ EXL9334

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP ELCRES EXL9334 is based on Polycarbonate (PC) siloxane copolymer resin. It is a UV stabilized, medium flow opaque material suitable for injection molding (IM) and sheet extrusion applications. This grade offers UL94 V0 @ 1.5mm flame retardancy based on non-bromine, non-chlorine FR systems, extreme low temperature ductility (-40°C) characteristics and excellent processability with opportunities for shorter IM cycle times compared to standard PC. It is available in a wide range of opaque colors and may be an excellent candidate for a wide range of applications.

UL Yellow Card Link E207780-638266

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**9**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
ASTM Data			
Melt Flow Index, MFI	**10**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2000**	MPa	ISO 527
Yield stress	**56**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Stress at break	**57**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2100**	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	**70**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	**65**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2100**	MPa	ASTM D 638
Tensile Strength at Yield	**58**	MPa	ASTM D 638
Tensile Strength at Break	**59**	MPa	ASTM D 638
Elongation at Yield	**6**	%	ASTM D 638
Elongation at Break	**115**	%	ASTM D 638
Flexural Modulus	**2050**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**750**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**685**	J/m	ASTM D 256
Temperature	**-40**	°C	-
Izod Impact unnotched, 1/8 in	**N**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**118**	°C	ISO 75-1/-2
Vicat softening temperature, B	**139**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**141**	°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. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**3.0**	mm	-
ASTM Data			
DTUL @ 66 psi	**140**	°C	ASTM D 648
DTUL @ 264 psi	**123**	°C	ASTM D 648
Vicat Temperature	**140**	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Volume Resistivity	**>1E15**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	**0.4**	%	Sim. to ISO 62
Humidity absorption	**0.15**	%	Sim. to ISO 62
Density	**1190**	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	**295 - 315**	°C	-
Mold temperature	**70 - 95**	°C	-
Zone 1	**270 - 295**	°C	-
Zone 2	**280 - 305**	°C	-
Zone 3	**295 - 315**	°C	-
Screw speed	**40 - 70**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding, Sheet Extrusion

Additives
Flame retarding agent

Special Characteristics
Flame retardant

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific