LEXAN™ Copolymer EXL9112 - Asia

PC | Saudi Basic Industries Corporation (SABIC)

Product Texts

Opaque PC-Siloxane copolymer with excellent processability. Improved flow, low temp. ductility. Non-chlorinated, non-brominated flame retardant product. UL rated V-0/5VA.

UL Yellow Card Link E207780-228377

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**16**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
ASTM Data			
Melt Flow Index, MFI	**17**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2200**	MPa	ISO 527
Yield stress	**59**	MPa	ISO 527
Yield strain	**5**	%	ISO 527
Stress at break	**55**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2300**	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	**60**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	**25**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**53**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**18**	kJ/m²	ISO 180/1A
Izod notched impact strength, +23°C, 3mm	**55**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	**20**	kJ/m²	ISO 180/1A
Ball indentation hardness	**95**	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	**2260**	MPa	ASTM D 638
Tensile Strength at Yield	**58**	MPa	ASTM D 638
Tensile Strength at Break	**58**	MPa	ASTM D 638
Elongation at Yield	**5.8**	%	ASTM D 638
Elongation at Break	**103**	%	ASTM D 638
Flexural Modulus	**2330**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**731**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**560**	J/m	ASTM D 256
Temperature	**-30**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	**143**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**144**	°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	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
Burning behav. 5V at thickness h	**5VB**	class	IEC 60695-11-20
Thickness tested	**2.5**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
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Glow Wire Ignition Temperature (GWIT)	**825**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**1**	mm	-
Glow Wire Ignition Temperature (GWIT)	**825**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**2**	mm	-

Glow Wire Ignition Temperature (GWIT)	**825**	°C	IEC 60695-2-13
GWIT - thickness tested (3)	**3**	mm	-
ASTM Data			
DTUL @ 66 psi	**136**	°C	ASTM D 648
DTUL @ 264 psi	**123**	°C	ASTM D 648
Vicat Temperature	**143**	°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
Comparative tracking index	**175**	-	IEC 60112

Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.35**	%	Sim. to ISO 62
Humidity absorption	**0.15**	%	Sim. to ISO 62
Density	**1190**	kg/m³	ISO 1183
Density	**1180**	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

Special Characteristics
Flame retardant

Additives
Flame retarding agent

Regional Availability
Asia Pacific