LEXAN™ Copolymer EXL6013 - Europe

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LEXAN EXL6013 is especially developed for applications requiring a high impact performance combined with an improved chemical resistance over standard polycarbonate.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**5**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2100**	MPa	ISO 527
Yield stress	**55**	MPa	ISO 527
Yield strain	**7**	%	ISO 527
Stress at break	**60**	MPa	ISO 527
Strain at break	**50**	%	ISO 527
Flexural modulus	**2150**	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	**75**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°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	**70**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	**60**	kJ/m²	ISO 180/1A
Ball indentation hardness	**90**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	**138**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**140**	°C	ISO 306
Thermal Conductivity	**0.2**	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	**850**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**1**	mm	-

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
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	**1200**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**290 - 320**	°C	-
Mold temperature	**80 - 120**	°C	-
Feed temperature	**60 - 80**	°C	-
Zone 1	**270 - 300**	°C	-
Zone 2	**280 - 310**	°C	-
Zone 3	**290 - 320**	°C	-

Characteristics

Processing
Injection Molding

Regional Availability
Europe

Chemical Resistance
General Chemical Resistance