

Product Texts

PC-Siloxane copolymer with excellent processability. Impact modified, medium flow, extreme low temp. ductility.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	7	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	8	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2270	MPa	ISO 527
Yield stress	54	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	58	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2090	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	70	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	60	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	70	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	60	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	1720	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Tensile Strength at Break	59	MPa	ASTM D 638
Elongation at Yield	5.5	%	ASTM D 638
Elongation at Break	100	%	ASTM D 638
Flexural Modulus	1990	MPa	ASTM D 790
Izod Impact notched, 1/8 in	801	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	694	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	3200	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	141	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	136	°C	ASTM D 648
DTUL @ 264 psi	122	°C	ASTM D 648
Vicat Temperature	141	°C	ASTM D 1525

Electrical properties

	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.6	-	IEC 62631-2-1
Dissipation factor, 1MHz	94	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2

Other properties

	Value	Unit	Test Standard
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62

LEXAN™ Copolymer EXL6414 - Europe

PC

Saudi Basic Industries Corporation (SABIC)

Density	1180	kg/m ³	ISO 1183
Density	1190	kg/m ³	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

Regional Availability

Europe

Special Characteristics

High impact or impact modified