

Product Texts

LNP ELCRES EXL9034 is based on Polycarbonate (PC) siloxane copolymer resin with excellent low temperature ductility, robust flame retardancy (V0/5VA), good processability and electrical tracking resistance. It is UV stabilized with F1 rating and is a good candidate for applications like photovoltaic connectors.

UL Yellow Card Link [F207780-103437942](https://www.ul.com/yellow-card-link/F207780-103437942)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	6	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	7	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2060	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	59	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2100	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	66	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	55	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	62	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	52	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2090	MPa	ASTM D 638
Tensile Strength at Yield	56	MPa	ASTM D 638
Tensile Strength at Break	60	MPa	ASTM D 638
Elongation at Yield	6	%	ASTM D 638
Elongation at Break	70	%	ASTM D 638
Flexural Modulus	2020	MPa	ASTM D 790
Izod Impact notched, 1/8 in	700	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	660	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, B	145	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	146	°C	ISO 306
Burning behav. at thickness h	V-0	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	-
ASTM Data			
DTUL @ 66 psi	138	°C	ASTM D 648
DTUL @ 264 psi	122	°C	ASTM D 648
Vicat Temperature	147	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			

Comparative tracking index	600	-	IEC 60112
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Other properties	Value	Unit	Test Standard
Density	1220	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	275 - 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

North America, Europe, Asia Pacific

Applications

Automotive