

Product Texts

LNP ELCRES ML4412 is based on Polycarbonate (PC) siloxane copolymer resin containing 20% glass fiber, medium flow, impact modified injection moldable grade. This grade is available in opaque colors only and is an excellent candidate for a broad range of applications that require a combination of stiffness and ductility.

UL Yellow Card Link [E207780-104298581](https://www.ulprospector.com/2020/04/29/104298581)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	11	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6500	MPa	ISO 527
Stress at break	110	MPa	ISO 527
Strain at break	3	%	ISO 527
Flexural modulus	5700	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	17	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	12	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 3mm	17	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	12	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	6300	MPa	ASTM D 638
Tensile Strength at Break	100	MPa	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	5800	MPa	ASTM D 790
Izod Impact notched, 1/8 in	140	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	700	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, 120°C/h 50N	142	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
ASTM Data			
DTUL @ 66 psi	135	°C	ASTM D 648
DTUL @ 264 psi	132	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water absorption	0.1	%	Sim. to ISO 62
Humidity absorption	0.03	%	Sim. to ISO 62
Density	1330	kg/m ³	ISO 1183
Density	1330	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	3 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	285 - 310	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 290	°C	-
Zone 3	280 - 300	°C	-

Screw speed	50 - 90	rpm	-
Back pressure	0.1 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

High impact or impact modified