

Product Texts

LNP™ ELCRIN™ Compound EXL9482RC resin (also known as ELCRIN ER015586) is a medium flow, unfilled, non-brominated, non-chlorinated flame retardant, Polycarbonate (PC) siloxane copolymer, dark colors only, utilizing a minimum of 72% post-consumer recycle content. Added features of this material include: UL V-0 rating at 1.5 mm thickness.

UL Yellow Card Link: [E207780-104562436](https://www.ul.com/yellow-card/E207780-104562436)

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	12	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2170	MPa	ISO 527
Yield stress	59.5	MPa	ISO 527
Yield strain	5.8	%	ISO 527
Stress at break	57	MPa	ISO 527
Strain at break	150	%	ISO 527
Flexural modulus, 23°C	2270	MPa	ISO 178
Charpy impact strength, +23°C	300	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	61	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	53	kJ/m ²	ISO 180/1A
Izod notched impact strength	16.1	kJ/m ²	ISO 180/1A
Temperature	-20	°C	-
ASTM Data			
Tensile Modulus	2170	MPa	ASTM D 638
Tensile Strength at Yield	60	MPa	ASTM D 638
Tensile Strength at Break	59	MPa	ASTM D 638
Elongation at Yield	5.8	%	ASTM D 638
Elongation at Break	150	%	ASTM D 638
Flexural Modulus	2300	MPa	ASTM D 790
Izod Impact notched, 1/8 in	800	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	470	J/m	ASTM D 256
Temperature	-20	°C	-
Izod Impact unnotched, 1/8 in	228	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	114	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	128	°C	ISO 75-1/-2
Vicat softening temperature, B	132	°C	ISO 306
Coeff. of linear therm. expansion, parallel	67	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1.5	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (2)	3	mm	-
ASTM Data			
DTUL @ 66 psi	128	°C	ASTM D 648

DTUL @ 264 psi	115	°C	ASTM D 648
Vicat Temperature	132	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	1200	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 - 110	°C	-
Zone 1	270 - 295	°C	-
Zone 2	280 - 305	°C	-
Zone 3	295 - 315	°C	-
Nozzle temperature	290 - 310	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Halogen-free, High impact or impact modified

Features

Copolymer

Certifications

Recycled Resin Content

Applications

IT / Business Machine, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America