

Product Texts

LNP ELCRIN WF0061iQ compound is based on Polybutylene terephthalate (PBT) resin utilizing ELCRIN iQ upcycling technology containing minimum 25% Post-Consumer Recycling (PCR) weight content and 30% glass fiber. Added features of this grade include: Non-Chlorinated, Non-Brominated Flame Retardant, UL94V0 and 5VA Flame Rating, Excellent Chemical Resistance. This is a good candidate for a variety of applications needing a more sustainable FR and PBT solution.

UL Yellow Card Link [E207780-100945514](https://www.ul.com/yellow-card/E207780-100945514)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11000	MPa	ISO 527
Yield stress	108	MPa	ISO 527
Yield strain	2	%	ISO 527
Stress at break	108	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus	10000	MPa	ISO 178
Izod impact strength, +23°C, 4mm	37	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	7	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	6	kJ/m ²	ISO 180/1A

ASTM Data	Value	Unit	Test Standard
Tensile Modulus	11000	MPa	ASTM D 638
Tensile Strength at Yield	105	MPa	ASTM D 638
Tensile Strength at Break	105	MPa	ASTM D 638
Elongation at Yield	2	%	ASTM D 638
Elongation at Break	2	%	ASTM D 638
Flexural Modulus	9600	MPa	ASTM D 790
Izod Impact notched, 1/8 in	72	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	55	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	570	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
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	3.0	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 66 psi	214	°C	ASTM D 648
DTUL @ 264 psi	200	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Volume Resistivity	15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.23	%	Sim. to ISO 62
Humidity absorption	0.09	%	Sim. to ISO 62

Density	1560	kg/m ³	ISO 1183
Density	1560	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110 - 120	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	245 - 260	°C	-
Mold temperature	40 - 100	°C	-
Feed temperature	40 - 60	°C	-
Zone 1	230 - 240	°C	-
Zone 2	235 - 250	°C	-
Zone 3	240 - 260	°C	-

Characteristics

Processing

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Chemical Resistance

General Chemical Resistance

Certifications

Recycled Resin Content

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific