

Product Texts

LNP ELCRIN WF006LXD_iQ is based on an environmentally responsible and sustainable low carbon footprint resin. This grade contains a minimum of 37% PCR weight content. It is a glass fiber reinforced iQ PBT resin with excellent strength, stiffness, dimensional stability and heat resistance. Material may be suited for applications where food contact compliance is required. Restrictions may apply – please request a food contact declaration for details.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	35	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10500	MPa	ISO 527
Stress at break	150	MPa	ISO 527
Strain at break	3	%	ISO 527
Flexural modulus, 23°C	9000	MPa	ISO 178
Flexural strength	210	MPa	ISO 178
Charpy impact strength, +23°C	54	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	48	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	8	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	49	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	8	kJ/m ²	ISO 180/1A
Izod notched impact strength	8	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Puncture energy, +23°C	7	J	ISO 6603-2
Puncture energy, -30°C	6	J	ISO 6603-2

ASTM Data			
Tensile Modulus	10500	MPa	ASTM D 638
Tensile Strength at Break	145	MPa	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	8600	MPa	ASTM D 790
Flexural Strength	205	MPa	ASTM D 790
Izod Impact notched, 1/8 in	73	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	74	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	630	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	205	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	218	°C	ISO 75-1/-2
Vicat softening temperature, B	200	°C	ISO 306
Coeff. of linear therm. expansion, parallel	27	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	140	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	27	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	140	E-6/K	ASTM D 696
DTUL @ 66 psi	218	°C	ASTM D 648
DTUL @ 264 psi	207	°C	ASTM D 648
Vicat Temperature	200	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1550	kg/m ³	ISO 1183
Water Absorption, 24hr	0.1	%	ASTM D 570

Water Absorption, Equilibrium	0.6	%	ASTM D 570
Density	1550	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	240 - 265	°C	-
Mold temperature	65 - 90	°C	-
Zone 1	220 - 230	°C	-
Zone 2	245 - 255	°C	-
Zone 3	260 - 270	°C	-
Nozzle temperature	250 - 260	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Certifications

Recycled Resin Content, Food contact

Applications

Automotive, Electrical and Electronical, Packaging, Sports Equipment

Regional Availability

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