

Product Texts

LNP ELCRIN WF006XiQ compound is based on Polybutylene terephthalate (PBT) resin utilizing ELCRIN iQ upcycling technology containing minimum 37% Post-Consumer Recycling (PCR) weight content and 30% glass fiber. Added features of this grade include: Excellent Strength, Stiffness and Dimensional Stability. Potential applications may include handles, connectors.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	38	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	52	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10700	MPa	ISO 527
Yield stress	139	MPa	ISO 527
Yield strain	1.6	%	ISO 527
Stress at break	139	MPa	ISO 527
Strain at break	1.6	%	ISO 527
Flexural modulus	9100	MPa	ISO 178
Charpy notched impact strength, +23°C	14	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	8	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	8	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	11800	MPa	ASTM D 638
Tensile Strength at Yield	114	MPa	ASTM D 638
Tensile Strength at Break	114	MPa	ASTM D 638
Elongation at Yield	2.2	%	ASTM D 638
Elongation at Break	2.2	%	ASTM D 638
Flexural Modulus	9100	MPa	ASTM D 790
Izod Impact notched, 1/8 in	82	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	83	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	770	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 0.45 MPa	217	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	203	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.09	%	Sim. to ISO 62
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1540	kg/m ³	ISO 1183
Density	1540	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	250 - 265	°C	-
Mold temperature	65 - 90	°C	-
Zone 1	240 - 255	°C	-
Zone 2	245 - 260	°C	-
Zone 3	250 - 265	°C	-
Screw speed	50 - 80	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Certifications

Recycled Resin Content

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific