

Product Texts

LNP ELCRIN WF006LiQ, utilizing ELCRIN iQ upcycling technology, is a 30% glass filled iQ PBT grade based on food contact compliant ingredients. Added features include PCR content, excellent strength, stiffness and dimensional stability. Potential applications may be water treatment pump, sanitation for kitchen/bath. This grade contains minimum 37% PCR weight content. Under test for Potable Water Approval : ACS,KTW, WRAS, W270, NSF.

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
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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
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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
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ASTM Data			
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
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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
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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 - 255	°C	-
Zone 3	250 - 265	°C	-
Screw speed	50 - 80	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Certifications

Recycled Resin Content, Food contact