

Product Texts

LNP ELCRIN 610001UiQ2 (also known as ELCRIN ER011568) is a non-brominated, non-chlorinated flame retardant Polycarbonate / Polybutylene Terephthalate (PC/PBT) alloy, utilizing iQ PBT generation 2 technology with minimum 12% post consumer recycled content. Added features of this material include: good impact strength, good chemical resistance, improved heat resistance, bright white color achievable, UL V-0 rating at 1.5 mm thickness and easy flow ability.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	265	°C	-
Load	5	kg	-

ASTM Data			
Melt Flow Index, MFI	23	g/10min	ASTM D 1238
Temperature	265	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
-----------------------	-------	------	---------------

ISO Data			
Tensile Modulus	2120	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	46	MPa	ISO 527
Strain at break	105	%	ISO 527
Flexural modulus, 23°C	2230	MPa	ISO 178
Charpy notched impact strength, +23°C	60	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	18	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	58	kJ/m ²	ISO 180/1A
Izod notched impact strength	17	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-

ASTM Data			
Tensile Modulus	2170	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Tensile Strength at Break	54	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	120	%	ASTM D 638
Flexural Modulus	2260	MPa	ASTM D 790
Izod Impact notched, 1/8 in	800	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	342	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
--------------------	-------	------	---------------

ISO Data			
Temp. of deflection under load, 1.80 MPa	90	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	105	°C	ISO 75-1/-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	-	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Yellow Card available	yes	-	-

ASTM Data			
Coefficient of Thermal Expansion, MD	71	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	76	E-6/K	ASTM D 696
DTUL @ 66 psi	105	°C	ASTM D 648
DTUL @ 264 psi	85	°C	ASTM D 648
Vicat Temperature	114	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Humidity absorption	0.06	%	Sim. to ISO 62

Density	1250	kg/m ³	ISO 1183
Density	1250	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.04	%	-
Melt temperature	245 - 275	°C	-
Mold temperature	60 - 80	°C	-
Zone 1	220 - 255	°C	-
Zone 2	220 - 265	°C	-
Zone 3	245 - 275	°C	-
Nozzle temperature	245 - 275	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Delivery form

White

Special Characteristics

Flame retardant, Halogen-free, High impact or impact modified, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Features

Ductile

Chemical Resistance

General Chemical Resistance

Certifications

Recycled Resin Content

Applications

Automotive, Building Construction, Electrical and Electronical, Sports Equipment

Regional Availability

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