

Product Texts

LNP ELCRIN CRX1314BTW is an amorphous PC copolymer resin that incorporates renewable feedstock through ISCC+ mass-balance certification to lower carbon footprint without compromising product performance. Features excellent chemical resistance combination with excellent impact strength and good optical properties (thin wall transparency). This medium flow resin features transparency to translucency based on thickness, low temperature ductility (-30C), and limited biocompatibility suitable for skin contact applications (ISO 10993 Part 5 for toxicity, Part 10 for skin sensitization, and Part 23 for irritation). Subject to LNP Healthcare management of change policy. An excellent candidate for a wide variety of transparent and translucent applications that require improved chemical resistance and ductility for healthcare applications.

UL Yellow Card Link: [E121562-104612026](https://www.ulprospector.com/121562-104612026)

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	11	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.007	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.007	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	2150	MPa	ASTM D 638
Tensile Strength at Break	59	MPa	ASTM D 638
Elongation at Yield	6.5	%	ASTM D 638
Elongation at Break	124	%	ASTM D 638
Izod Impact notched, 1/8 in	910	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	700	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	148	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.75	mm	-
Coefficient of Thermal Expansion, MD	63	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	70	E-6/K	ASTM D 696
DTUL @ 66 psi	142	°C	ASTM D 648
DTUL @ 264 psi	129	°C	ASTM D 648

Optical properties	Value	Unit	Test Standard
ASTM Data			
Haze	2	%	ASTM D 1003
Light Transmittance	89	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183
Density	1190	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	290 - 340	°C	-

Mold temperature	80 - 105	°C	-
Zone 1	270 - 320	°C	-
Zone 2	280 - 330	°C	-
Zone 3	290 - 340	°C	-
Nozzle temperature	290 - 340	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified, Transparent, Translucent

Features

Amorphous, Ductile, Copolymer

Chemical Resistance

General Chemical Resistance

Certifications

Contains renewable resources, Biocompatibility ISO 10993, ISCC Plus

Applications

Medical

Regional Availability

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