

**Product Texts**

LNP ELCRES CRX1314TW is an amorphous PC copolymer resin that offers 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
<b>ASTM Data</b>			
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
<b>ASTM Data</b>			
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
<b>ISO Data</b>			
Vicat softening temperature, B	148	°C	ISO 306
<b>ASTM Data</b>			
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
<b>ASTM Data</b>			
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 <sup>3</sup>	ISO 1183
Density	1190	kg/m <sup>3</sup>	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	<b>290 - 340</b>	°C	-
Screw speed	<b>50 - 100</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Special Characteristics**

High impact or impact modified, Transparent, Translucent

**Features**

Amorphous, Ductile, Copolymer

**Chemical Resistance**

General Chemical Resistance

**Certifications**

Biocompatibility ISO 10993

**Applications**

Medical

**Regional Availability**

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