LNP™ ELCRIN™ CRX1314BT

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP ELCRIN CRX1314BT 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 in combination with excellent impact strength and good optical properties (thin wall transparency). This medium flow resin features transparency to translucency based on thickness and low temperature ductility (-30C). An excellent candidate for a wide variety of transparent and translucent applications that require improved chemical resistance and ductility for electronics, consumer, and industrial applications.

UL Yellow Card Link: E121562-104612026

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/m³	ISO 1183
Density	**1190**	kg/m³	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, Environmental Stress Crack Resistance

Certifications
Contains renewable resources, ISCC Plus

Applications
IT / Business Machine, Electrical and Electronical

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