LNP™ ELCRES™ CX7410

(PC+ABS) Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP ELCRES CX7410 Polycarbonate (PC)/Acrylonitrile Butadiene Styrene (ABS)/PC siloxane copolymer (PC/ABS/EXL) blend is an injection moldable, medium flow, non chlorinated/brominated flame retardant grade. The product is available in a wide range of opaque colors and has a UL94 V0 at 1.5mm and 5VB at 2mm flame rating. This grade has improved chemical resistance, ductility and heat properties compared to standard PC/ABS blends.

UL Yellow Card Link: E45329-104592671

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**10**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**2.16**	kg	-
ASTM Data			
Melt Flow Index, MFI	**11**	g/10min	ASTM D 1238
Temperature	**260**	°C	-
Load	**2.16**	kg	-
Mold Shrinkage, MD	**0.0028**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.0033**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2500**	MPa	ISO 527
Yield stress	**65**	MPa	ISO 527
Yield strain	**4.6**	%	ISO 527
Nominal strain at break	**40**	%	ISO 527
Strain at break	**53**	%	ISO 527
Flexural modulus, 23°C	**2600**	MPa	ISO 178
Flexural strength	**98**	MPa	ISO 178
Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**46**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**45**	kJ/m²	ISO 180/1A
Izod notched impact strength	**15**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
ASTM Data			
Tensile Modulus	**2550**	MPa	ASTM D 638
Tensile Strength at Yield	**65**	MPa	ASTM D 638
Tensile Strength at Break	**55**	MPa	ASTM D 638
Elongation at Yield	**4.6**	%	ASTM D 638
Flexural Modulus	**2600**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**700**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**120**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**N**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**98**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**108**	°C	ISO 75-1/-2
Vicat softening temperature, B	**113**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**69.1**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**71.6**	E-6/K	ISO 11359-1/-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. 5V at thickness h	**5VB**	class	IEC 60695-11-20
Thickness tested	**2.0**	mm	-
Yellow Card available	**yes**	-	-
Glow Wire Ignition Temperature (GWIT)	**960**	°C	IEC 60695-2-13

GWIT - thickness tested (1)	**1**	mm	-
Glow Wire Ignition Temperature (GWIT)	**875**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**3**	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	**69.1**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**71.6**	E-6/K	ASTM D 696
DTUL @ 264 psi	**95**	°C	ASTM D 648
Vicat Temperature	**113**	°C	ASTM D 1525

Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.24**	%	Sim. to ISO 62
Humidity absorption	**0.12**	%	Sim. to ISO 62
Density	**1200**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.12**	%	ASTM D 570
Water Absorption, Equilibrium	**0.24**	%	ASTM D 570
Density	**1200**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**85 - 95**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.04**	%	-
Melt temperature	**265 - 290**	°C	-
Mold temperature	**65 - 85**	°C	-
Feed temperature	**40 - 60**	°C	-
Zone 1	**245 - 270**	°C	-
Zone 2	**255 - 280**	°C	-
Zone 3	**265 - 290**	°C	-
Nozzle temperature	**265 - 290**	°C	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Features
Color Stability, Ductile, Copolymer

Additives
Release agent

Chemical Resistance
General Chemical Resistance

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

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