LNP™ ELCRES™ DMX1233

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP ELCRES DMX1233 is a UV stabilized improved flow Polycarbonate (PC) copolymer resin. Available in both transparent and custom colours, this grade is a good candidate for 5G related devices, anti-scratch covers etc. Added features of this grade include: Improved Scratch Resistance and Improved Dielectric Performance (lower Df).

UL Yellow Card Link: E207780-104568852

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**21**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Mold Shrinkage, MD	**0.0073**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.0072**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2380**	MPa	ISO 527
Stress at break	**56.5**	MPa	ISO 527
Strain at break	**29.9**	%	ISO 527
Flexural modulus, 23°C	**2300**	MPa	ISO 178
Flexural strength	**104**	MPa	ISO 178
Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**3**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**4.37**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2505**	MPa	ASTM D 638
Tensile Strength at Break	**58.4**	MPa	ASTM D 638
Elongation at Break	**42.3**	%	ASTM D 638
Flexural Modulus	**2340**	MPa	ASTM D 790
Flexural Strength	**108**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**45**	J/m	ASTM D 256
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	**117**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**133**	°C	ISO 75-1/-2
Vicat softening temperature, B	**139**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**75**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**81**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.6**	mm	-
Yellow Card available	**yes**	-	-
ASTM Data			
DTUL @ 66 psi	**134**	°C	ASTM D 648
DTUL @ 264 psi	**121**	°C	ASTM D 648
Vicat Temperature	**146**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	**0.037**	%	ASTM D 570
Density	**1180**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**110 - 120**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Mold temperature	**70 - 95**	°C	-
Zone 1	**260 - 280**	°C	-

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Zone 2	**280 - 305**	°C	-
Zone 3	**295 - 315**	°C	-
Nozzle temperature	**290 - 310**	°C	-

Characteristics

Processing
Injection Molding

Applications
Automotive, Electrical and Electronical

Special Characteristics
U.V. stabilized or stable to weather, Transparent, Translucent

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

Features
Amorphous, Scratch Resistant, Copolymer

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