LNP™ ELCRIN™ SLX1271DB

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP ELCRIN SLX1271DB is a low viscosity, weatherable polycarbonate copolymer blend with enhanced UV stabilization available in diffusive colors with major component synthesized from bio-source. It offers the potential for selective plating on PC/ABS in intricate geometries via a 2K molding process. The material is targeted for automotive exterior applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	**18**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**1.2**	kg	-
Mold Shrinkage, MD	**0.0075**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2260**	MPa	ISO 527
Yield stress	**66**	MPa	ISO 527
Yield strain	**6.2**	%	ISO 527
Stress at break	**68**	MPa	ISO 527
Strain at break	**115**	%	ISO 527
Flexural modulus, 23°C	**2250**	MPa	ISO 178
Flexural strength	**97**	MPa	ISO 178
Charpy notched impact strength, +23°C	**8**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**7**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**10**	kJ/m²	ISO 180/1A
Izod notched impact strength	**7**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
Puncture energy, +23°C	**110**	J	ISO 6603-2
Puncture energy, -30°C	**108**	J	ISO 6603-2
ASTM Data			
Tensile Modulus	**2292**	MPa	ASTM D 638
Tensile Strength at Yield	**65**	MPa	ASTM D 638
Tensile Strength at Break	**62**	MPa	ASTM D 638
Elongation at Yield	**6.3**	%	ASTM D 638
Elongation at Break	**83**	%	ASTM D 638
Flexural Modulus	**2480**	MPa	ASTM D 790
Flexural Strength	**98**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**239**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**98**	J/m	ASTM D 256
Temperature	**-30**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**123**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**134**	°C	ISO 75-1/-2
Vicat softening temperature, B	**138**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**71**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**72**	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**71**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**72**	E-6/K	ASTM D 696
DTUL @ 66 psi	**133**	°C	ASTM D 648
DTUL @ 264 psi	**123**	°C	ASTM D 648
Vicat Temperature	**138**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	**0.32**	%	Sim. to ISO 62
Humidity absorption	**0.15**	%	Sim. to ISO 62
Density	**1210**	kg/m³	ISO 1183
Density	**1200**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**280 - 310**	°C	-
Mold temperature	**80 - 110**	°C	-
Zone 1	**260 - 280**	°C	-
Zone 2	**270 - 290**	°C	-
Zone 3	**280 - 310**	°C	-
Nozzle temperature	**270 - 290**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
Platable, U.V. stabilized or stable to weather

Features
Light Diffusing, Copolymer

Certifications
Contains renewable resources

Applications
Automotive, Electrical and Electronical

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