LNP™ ELCRIN™ DI001EXG

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

Product Texts

LNP ELCRIN DI001EXG compound is based on Polycarbonate (PC) resin containing silicone. Major component synthesized from bio source. Renewable content certified by ISCC+ mass balance methodology. Added features of this grade include: Internally Lubricated, Easy Molding, Wear Resistant.

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2200**	MPa	ISO 527
Yield stress	**57**	MPa	ISO 527
Yield strain	**5.5**	%	ISO 527
Flexural modulus, 23°C	**2100**	MPa	ISO 178
Izod impact strength, +23°C	**165**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**40**	kJ/m²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**124**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**137**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**72**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**72**	E-6/K	ISO 11359-1/-2

Other properties	Value	Unit	Test Standard
Density	**1190**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**300 - 315**	°C	-
Mold temperature	**80 - 119**	°C	-
Zone 1	**295 - 305**	°C	-
Zone 2	**305 - 315**	°C	-
Zone 3	**310 - 320**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing

Injection Molding

Additives

Lubricants

Certifications

Contains renewable resources, ISCC Plus

Applications

Building Construction, IT / Business Machine, Electrical and Electronical, Sports Equipment

Regional Availability

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