LNP™ ELCRIN™ DI001EXG

DESCRIPTION

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.

GENERAL INFORMATION	
Features	Good Processability, Wear resistant, No PFAS intentionally added
Fillers	Unreinforced, Silicone
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	57	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.5	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	88	MPa	ISO 178
Flexural Modulus, 2 mm/min	2100	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	165	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	40	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	7.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.2E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	124	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.19	g/cm³	ISO 1183
INJECTION MOLDING [2]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 315	°C	
Front - Zone 3 Temperature	310 – 320	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	305 – 315	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 119	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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