

LNP* Lubricomp* Compound EL003

Americas: COMMERCIAL

Also known as: EL-4030
Product Reorder Name: EL003

LNP LUBRICOMP* EL003 is a compound based on Polyetherimide resin containing PTFE. Added features of this material include: Internally Lubricated.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	88	MPa	ASTM D 638
Tensile Stress, break	85	MPa	ASTM D 638
Tensile Strain, yield	6.5	%	ASTM D 638
Tensile Strain, break	10.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2750	MPa	ASTM D 638
Flexural Stress	135	MPa	ASTM D 790
Flexural Modulus	2890	MPa	ASTM D 790
Tensile Stress, yield	83	MPa	ISO 527
Tensile Stress, break	82	MPa	ISO 527
Tensile Strain, yield	6.3	%	ISO 527
Tensile Strain, break	8.1	%	ISO 527
Tensile Modulus, 1 mm/min	2740	MPa	ISO 527
Flexural Stress	130	MPa	ISO 178
Flexural Modulus	3020	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	747	J/m	ASTM D 4812
Izod Impact, notched, 23°C	69	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	9	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	61	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	182	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.78E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.76E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.77E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.76E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	182	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.35	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.21	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.8 - 1.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.8 - 1.1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.8 - 0.11	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.8 - 0.11	%	ISO 294
Wear Factor Washer	106	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified

Dynamic COF	0.3	-	ASTM D 3702 Modified
Static COF	0.23	-	ASTM D 3702 Modified
Density	1.35	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62

Source GMD, last updated:10/04/2004

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	360 - 365	°C
Front - Zone 3 Temperature	365 - 375	°C
Middle - Zone 2 Temperature	355 - 365	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

Source GMD, last updated:10/04/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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