

LNP* Lubricomp* Compound DP001E

Americas: COMMERCIAL

Also known as: LC DL-4510 EM
Product Reorder Name: DP001E

LNP* Lubricomp* DP001E is a Polycarbonate base resin containing PTFE and Silicone. Characteristics are Easy Molding.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	54	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	45	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	38.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	2240	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2230	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	54	MPa	ISO 527
Tensile Stress, break, 5 mm/min	41	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	6	%	ISO 527
Tensile Strain, break, 5 mm/min	48.3	%	ISO 527
Tensile Modulus, 1 mm/min	2130	MPa	ISO 527
Flexural Stress	72	MPa	ISO 178
Flexural Modulus, 2 mm/min	2030	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1460	J/m	ASTM D 4812
Izod Impact, notched, 23°C	595	J/m	ASTM D 256
Multiaxial Impact	44	J	ISO 6603
Instrumented Impact Total Energy, 23°C	35	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	181	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	36	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.1E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	140	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	126	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.2	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5 - 0.7	%	ASTM D 955
Wear Factor Washer	153	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0 - 0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.21	-	ASTM D 3702 Modified
Static COF	0.11	-	ASTM D 3702 Modified
Density	1.2	g/cm ³	ISO 1183

Processing

Parameter	Value	Unit
Injection Molding		
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
Middle - Zone 2 Temperature	305 - 315	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:10/03/2008

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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