



LNP™ LUBRICOMP™ Compound DP003

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound DL-4530

Product reorder name: DP003

LNP™ LUBRICOMP™ DP003 is a compound based on Polycarbonate resin containing 15% PTFE/Silicone. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	490	kgf/cm ²	ASTM D 638
Tensile Stress, break	430	kgf/cm ²	ASTM D 638
Tensile Strain, yield	5.6	%	ASTM D 638
Tensile Strain, break	35.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	22700	kgf/cm ²	ASTM D 638
Flexural Stress	770	kgf/cm ²	ASTM D 790
Flexural Modulus	19300	kgf/cm ²	ASTM D 790
Tensile Stress, yield	49	MPa	ISO 527
Tensile Stress, break	41	MPa	ISO 527
Tensile Strain, yield	5.8	%	ISO 527
Tensile Strain, break	41.2	%	ISO 527
Tensile Modulus, 1 mm/min	2160	MPa	ISO 527
Flexural Stress	75	MPa	ISO 178
Flexural Modulus	1840	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	28	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	289	cm-kgf	ASTM D 3763
Multiaxial Impact	626	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	31	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648



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THERMAL			
CTE, -40°C to 40°C, flow	6.66E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.02E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.74E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.12E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	129	°C	ISO 75/Af
PHYSICAL			
Density	1.26	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.9 - 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 1.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.8 - 1	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1 - 1.2	%	ISO 294
Wear Factor Washer	42	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.1	-	ASTM D 3702 Modified
Static COF	0.26	-	ASTM D 3702 Modified
Density	1.26	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.19	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL 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