



LNP™ LUBRICOMP™ Compound DP003EH

Americas: COMMERCIAL

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

Product reorder name: DP003EH

LNP™ LUBRICOMP™ DP003EH is a compound based on Polycarbonate resin containing 15% PTFE/Silicone. Added features of this material include: Easy Molding, Wear Resistant, Healthcare.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	410	kgf/cm ²	ASTM D 638
Tensile Stress, break	470	kgf/cm ²	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	490	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	430	kgf/cm ²	ASTM D 638
Tensile Strain, yield	5	%	ASTM D 638
Tensile Strain, break	17	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.9	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	49	%	ASTM D 638
Tensile Modulus, 50 mm/min	20700	kgf/cm ²	ASTM D 638
Flexural Stress	790	kgf/cm ²	ASTM D 790
Flexural Modulus	21000	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	21400	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	48	MPa	ISO 527
Tensile Stress, break, 5 mm/min	46	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.7	%	ISO 527
Tensile Strain, break, 5 mm/min	116	%	ISO 527
Tensile Modulus, 1 mm/min	2010	MPa	ISO 527
Flexural Stress	61	MPa	ISO 178
Flexural Modulus, 2 mm/min	1920	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	153	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	48	cm-kgf/cm	ASTM D 256



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IMPACT			
Multiaxial Impact	208	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	302	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	174	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	41	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	128	°C	ASTM D 648
CTE, -30°C to 30°C, flow	7.8E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.6E-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	127	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.26	-	ASTM D 792
Density	1.26	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.13	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.6 - 0.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 1	%	ASTM D 955
Wear Factor Washer	28	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	-1	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.29	-	ASTM D 3702 Modified
Static COF	0.15	-	ASTM D 3702 Modified
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