



LNP™ LUBRICOMP™ Compound DL002ER

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound DL-4020 EM MR

Product reorder name: DL002ER

LNP™ LUBRICOMP™ DL002ER is a compound based on Polycarbonate resin containing 10% PTFE. Added features of this material include: Wear Resistant, Easy Molding, Mold Release.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	560	kgf/cm ²	ASTM D 638
Tensile Stress, break	490	kgf/cm ²	ASTM D 638
Tensile Strain, yield	5.9	%	ASTM D 638
Tensile Strain, break	66.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	21000	kgf/cm ²	ASTM D 638
Flexural Modulus	21000	kgf/cm ²	ASTM D 790
Tensile Stress, yield	56	MPa	ISO 527
Tensile Stress, break	46	MPa	ISO 527
Tensile Strain, yield	5.7	%	ISO 527
Tensile Strain, break	70.7	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress	73	MPa	ISO 178
Flexural Modulus	2200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	253	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	13	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	409	cm-kgf	ASTM D 3763
Multiaxial Impact	451	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	174	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	135	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	123	°C	ASTM D 648



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THERMAL			
CTE, -40°C to 40°C, flow	7.56E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af
PHYSICAL			
Density	1.24	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.7	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.79	%	ISO 294
Wear Factor Washer	34	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.24	-	ASTM D 3702 Modified
Static COF	0.07	-	ASTM D 3702 Modified
Density	1.24	g/cm ³	ISO 1183



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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