LNP™ LUBRICOMP™ COMPOUND DL002ER

DL-4020 EM MR
REGION ASIA

DESCRIPTION

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 PROPERTY VALUES

Revision 20181207

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	55	MPa	ASTM D 638
Tensile Stress, break	48	MPa	ASTM D 638
Tensile Strain, yield	5.9	%	ASTM D 638
Tensile Strain, break	66.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Flexural Modulus	2060	MPa	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	2488	J/m	ASTM D 4812
Izod Impact, notched, 23°C	133	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	40	J	ASTM D 3763
Multiaxial Impact	44	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	174	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	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
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/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.6 – 0.8	%	ASTM D 955

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Mold Shrinkage, xflow, 24 hrs	0.7 – 0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.7	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.79	%	ISO 294
Wear Factor Washer	34	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.24	-	ASTM D 3702 Modified: Manual
Static COF	0.07	-	ASTM D 3702 Modified: Manual
Density	1.24	g/cm³	ISO 1183
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	

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