

LNP™ LUBRICOMP™ COMPOUND DL003EXJ

DL-4030 EM LE HC
REGION AMERICAS

DESCRIPTION

LNP* LUBRICOMP* DL003EXJ is a compound based on Polycarbonate containing 15% PTFE. Characteristics of this grade are Easy Molding, Low Extractable, Wear Resistant, Healthcare.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	46	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	38	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	17.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2090	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2190	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Stress, break, 5 mm/min	34	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.4	%	ISO 527
Tensile Strain, break, 5 mm/min	21.8	%	ISO 527
Tensile Modulus, 1 mm/min	1980	MPa	ISO 527
Flexural Stress	67	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1780	J/m	ASTM D 4812
Izod Impact, notched, 23°C	176	J/m	ASTM D 256
Multiaxial Impact	28	J	ISO 6603
Instrumented Impact Total Energy, 23°C	33	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	110	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	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	130	°C	ASTM D 648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	7.7E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	124	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.29	-	ASTM D 792
Density	1.29	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
Wear Factor Washer	15	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.38	-	ASTM D 3702 Modified: Manual
Static COF	0.23	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
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	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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