

LNP™ LUBRICOMP™ COMPOUND DFL34EH

DFL-4034 EM HC
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP DFL34EH is a compound based on Polycarbonate containing 20% Glass Fiber, 15% PTFE. Added features of this material include: Easy Molding, Healthcare, Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	7190	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	145	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6320	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	93	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.8	%	ISO 527
Tensile Strain, break, 5 mm/min	3.1	%	ISO 527
Tensile Modulus, 1 mm/min	6650	MPa	ISO 527
Flexural Stress	150	MPa	ISO 178
Flexural Modulus, 2 mm/min	6190	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	740	J/m	ASTM D 4812
Izod Impact, notched, 23°C	149	J/m	ASTM D 256
Multiaxial Impact	6	J	ISO 6603
Instrumented Impact Total Energy, 23°C	19	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	48	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	146	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	142	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.74E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.3E-05	1/°C	ASTM D 696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.48	-	ASTM D 792
Density	1.47	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.09	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.02 – 0.04	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.2 – 0.4	%	ASTM D 955
Wear Factor Washer	89	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	13	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.46	-	ASTM D 3702 Modified: Manual
Static COF	0.5	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°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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