

LNP™ LUBRICOMP™ COMPOUND DFL34

DFL-4034

REGION AMERICAS

DESCRIPTION

LNP* LUBRICOMP* DFL34 is a compound based on Polycarbonate resin containing 20% Glass Fiber, 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	97	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	6860	MPa	ASTM D 638
Flexural Stress	143	MPa	ASTM D 790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	144	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4910	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	2	MPa	ISO 527
Tensile Stress, break, 5 mm/min	89	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	94	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.9	%	ISO 527
Tensile Strain, break, 5 mm/min	3.5	%	ISO 527
Tensile Modulus, 1 mm/min	6500	MPa	ISO 527
Flexural Stress	153	MPa	ISO 178
Flexural Strain, break, 2 mm/min	-	%	ISO 178
Flexural Modulus, 2 mm/min	6010	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	780	J/m	ASTM D 4812
Izod Impact, notched, 23°C	169	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	22	J	ASTM D 3763
Multiaxial Impact	7	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m ²	ISO 180/1U

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	143	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.46	-	ASTM D 792
Density	1.46	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.11	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 – 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.3 – 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.2 – 0.4	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.3 – 0.5	%	ISO 294
Wear Factor Washer	76	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.52	-	ASTM D 3702 Modified: Manual
Static COF	0.67	-	ASTM D 3702 Modified: Manual
Density	1.46	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.16	%	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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