LNP™ LUBRICOMP™ COMPOUND DFL38

DFL-4038

DESCRIPTION

LNP* LUBRICOMP* DFL38 is a compound based on Polycarbonate resin containing 40% Glass Fiber, 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	102	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	102	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 5 mm/min	11760	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	196	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	196	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	12100	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	127	MPa	ISO 527
Tensile Stress, break, 5 mm/min	127	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.9	%	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	12880	MPa	ISO 527
Flexural Stress	192	MPa	ISO 178
Flexural Modulus, 2 mm/min	11560	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	647	J/m	ASTM D 4812
Izod Impact, notched, 23°C	138	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	17	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	42	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	143	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	137	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	3.9E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	145	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.7	-	ASTM D 792
Density	1.69	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.06	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ASTM D 955

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Wear Factor Washer	23	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.48	-	ASTM D 3702 Modified: Manual
Static COF	0.51	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.09	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E121562-101344609	-	-
UL Recognized, 94V-1 Flame Class Rating	≥3	mm	UL 94
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	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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