LNP™ LUBRICOMP™ COMPOUND DFL36P

DFL-4036 EP

DESCRIPTION

LNP* LUBRICOMP* DFL36P is a compound based on Polycarbonate containing 30% Glass Fiber 15% PTFE. Added features of this material include: Exceptional Processing. Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191211

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	113	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	9770	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	176	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	8920	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	112	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	9520	MPa	ISO 527
Flexural Stress	172	MPa	ISO 178
Flexural Modulus, 2 mm/min	8830	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	689	J/m	ASTM D 4812
Izod Impact, notched, 23°C	132	J/m	ASTM D 256
Multiaxial Impact	5	J	ISO 6603
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	137	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	133	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.02E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.46E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	133	°C	ISO 75/Af
PHYSICAL			
Density	1.56	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.07	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2 – 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Wear Factor Washer	96	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	14	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.47	-	ASTM D 3702 Modified: Manual
Static COF	0.62	-	ASTM D 3702 Modified: Manual

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.56	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.11	%	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	

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