LNP™ LUBRICOMP™ COMPOUND IZL33

DESCRIPTION

LNP™ LUBRICOMP™ IZL33 is a compound based on Nylon 6/12 resin containing 15% Milled Fiber and 15% PTFE. Added features of this grade include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191210

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Flexural modulus	2500	MPa	ASTM D 790
Flexural Modulus	2707	MPa	ISO 178
Flexural Stress	73	MPa	ASTM D 790
Tensile Modulus, 5 mm/min	3410	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4.6	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.3	%	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	44	MPa	ASTM D 638
Tensile Modulus, 1 mm/min	3338	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	45	MPa	ISO 527
Tensile Stress, break, 5 mm/min	44	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Strain, break, 5 mm/min	7	%	ISO 527
IMPACT			
Izod Impact, notched, 23°C	32	J/m	ASTM D 256
Izod Impact, unnotched, 23°C	188	J/m	ASTM D 4812
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	13	kJ/m²	ISO 180/1U
Multiaxial Impact	1.22	J	ISO 6603
Multiaxial Impact	3.6	J	ASTM D 3763
THERMAL			
HDT, 1.8 MPa, 3.2mm, unannealed	128	°C	ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed	190	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	89	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	175	°C	ISO 75/Bf
CTE, -30°C to 30°C, flow	0.000076	1/°C	ASTM E 831
CTE, -30°C to 30°C, xflow	0.000088	1/°C	ASTM E 831
PHYSICAL			
Mold Shrinkage, flow, 24 hrs	1.9	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.7	%	ASTM D 955
Moisture Absorption, 50% RH, 24 hrs	0.15	%	ASTM D 570
Moisture Absorption (23°C / 50% RH)	0.11	%	ISO 62
Wear Factor Washer	77	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D 3702 Modified: Manual
Static COF	0.41	-	ASTM D 3702 Modified: Manual
Wear Factor Ring	16.7	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	1.3	-	ASTM D 792
Density	1.29	g/cm³	ASTM D 792
INJECTION MOLDING			
Drying Temperature	82	°C	
Drying Time	4	hrs	
Melt Temperature	271 – 276	°C	
Front - Zone 3 Temperature	271 – 282	°C	
Middle - Zone 2 Temperature	260 – 271	°C	
Rear - Zone 1 Temperature	254 – 265	°C	
Mold Temperature	65 – 93	°C	
Back Pressure	0.17 – 0.34	MPa	
Screw Speed	30 – 60	rpm	
Maximum Moisture Content	0.12 – 0.2	%	

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