LNP™ LUBRICOMP™ COMPOUND IFL34

IFL-4034
REGION ASIA

DESCRIPTION

LNP LUBRICOMP IFL34 is a compound based on Nylon 6/12 resin containing 20% Glass Fiber, 15% PTFE. Added features of this material include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20181217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	115	MPa	ASTM D 638
Tensile Stress, break	115	MPa	ASTM D 638
Tensile Strain, yield	3.1	%	ASTM D 638
Tensile Strain, break	3.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	6890	MPa	ASTM D 638
Flexural Stress	172	MPa	ASTM D 790
Flexural Modulus	5510	MPa	ASTM D 790
Tensile Stress, yield	121	MPa	ISO 527
Tensile Stress, break	121	MPa	ISO 527
Tensile Strain, yield	3	%	ISO 527
Tensile Strain, break	3	%	ISO 527
Tensile Modulus, 1 mm/min	7100	MPa	ISO 527
Flexural Stress	176	MPa	ISO 178
Flexural Modulus	6100	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	929	J/m	ASTM D 4812
Izod Impact, notched, 23°C	96	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	8	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	53	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	212	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	197	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.96E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.9E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	212	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	195	°C	ISO 75/Af
PHYSICAL			
Density	1.35	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 – 1.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.41	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.1	%	ISO 294
Wear Factor Washer	18	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.46	-	ASTM D 3702 Modified: Manual
Static COF	0.47	-	ASTM D 3702 Modified: Manual
Density	1.35	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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