LNP™ LUBRILOY™ COMPOUND Z20001

Z-FR
REGION EUROPE

DESCRIPTION

LNP LUBRILOY Z20001 is a compound based on PPE+PS Blend resin containing Proprietary Lubricant. Added features of this material include: Wear Resistant, Flame Retardant.

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	57	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	40	%	ASTM D 638
Tensile Modulus, 5 mm/min	2120	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2130	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	58	MPa	ISO 527
Tensile Stress, break, 5 mm/min	49	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 5 mm/min	24	%	ISO 527
Tensile Modulus, 1 mm/min	2000	MPa	ISO 527
Flexural Stress	74	MPa	ISO 178
Flexural Modulus, 2 mm/min	1920	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	2110	J/m	ASTM D 4812
Izod Impact, notched, 23°C	419	J/m	ASTM D 256
Multiaxial Impact	45	J	ISO 6603
Instrumented Impact Total Energy, 23°C	46	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	210	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	31	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	120	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	105	°C	ASTM D 648
CTE, -30°C to 30°C, flow	8.7E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	9.8E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	116	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	99	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.1	-	ASTM D 792
Density	1.1	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.8 – 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 – 3	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Wear Factor Washer	54	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	0	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.27	-	ASTM D 3702 Modified: Manual
Static COF	0.19	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.22	%	ISO 62
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	275 – 295	°C	
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	60 – 95	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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