



LNP™ LUBRILOY™ Compound Z20001

Americas: COMMERCIAL

Also known as: LNP™ LUBRILOY™ Compound Z-FR

Product reorder name: Z20001

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 PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	580	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	480	kgf/cm ²	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	21600	kgf/cm ²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	21700	kgf/cm ²	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	215	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	42	cm-kgf/cm	ASTM D 256
Multiaxial Impact	458	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	469	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	210	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	31	kJ/m ²	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



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THERMAL			
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/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.8 - 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Wear Factor Washer	54	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.27	-	ASTM D 3702 Modified
Static COF	0.19	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.22	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
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