

LNPT[™] LUBRILLOY[™] COMPOUND Z2000

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DESCRIPTION

LNP LUBRILLOY Z2000 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing proprietary lubricant. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component, Water Management
Consumer	Sport / Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20240122

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	46	MPa	ASTM D638
Tensile Stress, break	42	MPa	ASTM D638
Tensile Strain, yield	4.2	%	ASTM D638
Tensile Strain, break	52.3	%	ASTM D638
Tensile Modulus, 50 mm/min	1820	MPa	ASTM D638
Flexural Stress	74	MPa	ASTM D790
Flexural Modulus	2080	MPa	ASTM D790
Tensile Stress, yield	38	MPa	ISO 527
Tensile Stress, break	41	MPa	ISO 527
Tensile Strain, yield	3.2	%	ISO 527
Tensile Strain, break	37.3	%	ISO 527
Tensile Modulus, 1 mm/min	1810	MPa	ISO 527
Flexural Stress	58	MPa	ISO 178
Flexural Modulus	1860	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	2034	J/m	ASTM D4812
Izod Impact, notched, 23°C	106	J/m	ASTM D256
Izod Impact, unnotched 80°10°4 +23°C	172	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	121	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.19E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.89E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	8.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.9E-05	1/°C	ISO 11359-2
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	120	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.04	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.06	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.89	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.15	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.89	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.15	%	ISO 294
Wear Factor Washer	121	10 ⁻¹⁰ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.19	-	ASTM D3702 Modified: Manual
Static COF	0.24	-	ASTM D3702 Modified: Manual
Density	1.04	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62
FLAME CHARACTERISTICS			
Glow Wire Ignitability Temperature, 1.0 mm	725	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	725	°C	IEC 60695-2-13
Glow Wire Flammability Index, 1.0 mm	700	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	700	°C	IEC 60695-2-12
INJECTION MOLDING ⁽³⁾			
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	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.



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