LNP™ LUBRILOY™ COMPOUND W8000

DESCRIPTION

LNP LUBRILOY W8000 compound is a PBT based, internally lubricated injection molding grade. This compound offers improved wear and friction performance without the use of intentionally added PFAS materials.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding, Extrusion, Compression molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Consumer Goods, Sport/Leisure, Home Appliances, Commercial Appliance, Furniture
Electrical and Electronics	Electronic Components, Printer Copier
Industrial	Industrial General

TYPICAL PROPERTY VALUES

Revision 20250924

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Modulus, 1 mm/min	2487	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	52	MPa	ISO 527
Tensile Stress, break, 50 mm/min	48	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	14	%	ISO 527
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	78	MPa	ISO 178
Flexural Stress, break, 2 mm/min	77	MPa	ISO 178
Tensile Modulus, 50 mm/min	2469	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	52	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	18	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2390	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	78	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	80	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	3.7	kJ/m²	ISO 180/1A
Izod Impact, notched, 23°C	26	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	52	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL [1]			
Moisture Absorption (23°C / 50% RH)	0.028	%	ISO 62
Moisture Absorption, (50% RH, Equilibrium)	0.028	%	ASTM D570
Mold Shrinkage, flow [2]	2.1	%	SABIC method
Mold Shrinkage, xflow [2]	2.2	%	SABIC method
Specific Gravity	1.29	-	ASTM D792
Melt Flow Rate, 250°C/5.0 kg	48	g/10 min	ISO 1133
Wear Factor Washer	40	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.48	-	ASTM D3702 Modified: Manual
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	
PROFILE EXTRUSION			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	250 – 275	°C	
Barrel - Zone 1 Temperature	250 – 260	°C	
Barrel - Zone 2 Temperature	250 – 265	°C	
Barrel - Zone 3 Temperature	250 – 265	°C	
Barrel - Zone 4 Temperature	250 – 265	°C	
Die Temperature	266 – 266	°C	

(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.

DISCLAIMER