

LNPTM LUBRICOMPTM COMPOUND PDXF89080

PDX-F-89080

DESCRIPTION

LNP LUBRICOMP PDXF89080 compound is based on Polyethylene (PE) resin containing proprietary lubricant. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyethylene, Unspecified (PE, Unspecified)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	10	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	9	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	73	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	90	%	ASTM D638
Tensile Modulus, 5 mm/min	200	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	120	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	9	MPa	ISO 527
Tensile Stress, break, 5 mm/min	8	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	88	%	ISO 527
Tensile Strain, break, 5 mm/min	164	%	ISO 527
Tensile Modulus, 1 mm/min	240	MPa	ISO 527
Flexural Stress	5	MPa	ISO 178
Flexural Modulus, 2 mm/min	120	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	304	J/m	ASTM D256
Multiaxial Impact	19	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	19	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	37	kJ/m ²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	42	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	23	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.08E-04	1 / °C	ASTM D696
CTE, -30°C to 30°C, xflow	1.99E-04	1 / °C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	41	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	23	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	0.92	-	ASTM D792
Density	0.92	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.03	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	2 – 4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1 – 3	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	40 – 55	°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.

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