

LNPTM LUBRICOMPTM COMPOUND BX03658N

BX03658N

DESCRIPTION

LNP LUBRICOMP BX03658N compound is based on Styrene-Acrylonitrile (SAN) resin containing proprietary fillers. Added features of this grade include: Wear Resistant, Tight Dimensional Tolerances, Good for Water Meter applications.

GENERAL INFORMATION	
Features	Wear resistant, Dimensional stability
Fillers	Unreinforced
Polymer Types	Styrene Acrylonitrile (SAN)
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, brk, Type I, 5 mm/min	52	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.5	%	ASTM D638
Tensile Modulus, 5 mm/min	6520	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	84	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	6320	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	50	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	6130	MPa	ISO 527
Flexural Stress	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	6060	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	124	J/m	ASTM D4812
Izod Impact, notched, 23°C	17	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	2	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	8	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	101	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	95	°C	ASTM D648
CTE, -30°C to 30°C, flow	4.6E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	5.3E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	101	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	96	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.37	-	ASTM D792
Density	1.37	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.11	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.3 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4 – 0.6	%	ASTM D955
Wear Factor Washer	163	10 ⁻¹⁰ in ⁴ 5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	11	10 ⁻¹⁰ in ⁴ 5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D3702 Modified: Manual
Static COF	0.44	-	ASTM D3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.16	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15	%	
Melt Temperature	260	°C	
Front - Zone 3 Temperature	275 – 290	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	205 – 215	°C	
Mold Temperature	80 – 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.

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