

LNPT[™] LUBRICOMP[™] COMPOUND MX06404

MFL-4034 HS LE
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP MX06404 compound is based on Polypropylene (PP) resin containing 20% glass fiber and 15% PTFE. Added features of this grade include: Heat Stabilized, Low Extractable, Wear Resistant.

GENERAL INFORMATION	
Features	Heat Stabilized, Wear resistant, Food contact
Fillers	Glass Fiber, PTFE
Polymer Types	Polypropylene, Unspecified (PP, 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	39	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	33	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	1.2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D638
Tensile Modulus, 5 mm/min	5730	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	61	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4480	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	38	MPa	ISO 527
Tensile Stress, break, 5 mm/min	36	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.1	%	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	5320	MPa	ISO 527
Flexural Stress	59	MPa	ISO 178
Flexural Modulus, 2 mm/min	4580	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	150	J/m	ASTM D4812
Izod Impact, notched, 23°C	40	J/m	ASTM D256
Multiaxial Impact	2	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	11	J	ASTM D3763

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, unnotched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	103	°C	ASTM D648
CTE, -30°C to 30°C, flow	6.1E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	8.4E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	97	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.13	-	ASTM D792
Density	1.14	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.13	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.7 – 0.9	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1 – 3	%	ASTM D955
Wear Factor Washer	61	10 ⁻¹⁰ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	1	10 ⁻¹⁰ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.3	-	ASTM D3702 Modified: Manual
Static COF	0.28	-	ASTM D3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°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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