

LNPTM LUBRICOMPTM COMPOUND ML003S

ML-4030 HS

DESCRIPTION

LNP LUBRICOMP ML003S compound is based on Polypropylene (PP) resin containing 15% PTFE. Added features of this grade include: Heat Stabilized, Wear Resistant.

GENERAL INFORMATION	
Features	Heat Stabilized, Wear resistant
Fillers	Unreinforced, 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	34	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	27	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	23	%	ASTM D638
Tensile Modulus, 5 mm/min	1980	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	1590	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	33	MPa	ISO 527
Tensile Stress, break, 5 mm/min	28	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 5 mm/min	18	%	ISO 527
Tensile Modulus, 1 mm/min	1680	MPa	ISO 527
Flexural Stress	42	MPa	ISO 178
Flexural Modulus, 2 mm/min	1700	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	499	J/m	ASTM D4812
Izod Impact, notched, 23°C	38	J/m	ASTM D256
Multiaxial Impact	1	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	3	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	111	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	57	°C	ASTM D648
CTE, -30°C to 30°C, flow	9.1E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	1.06E-04	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	102	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	57	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	0.99	-	ASTM D792
Density	0.99	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	2 – 4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	2 – 4	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.01	%	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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