

Revision 20230720

# LNPTM LUBRICOMPTM COMPOUND WX07423H

# PDX-W-07423 HC

### **DESCRIPTION**

LNP LUBRICOMP WX07423H compound is based on Polybutylene Terephthalate (PBT) resin containing proprietary lubricants. Added features of this grade include: Wear Resistant, Healthcare.

GENERAL INFORMATION	
Features	Wear resistant, Healthcare/Formula lock
Fillers	Proprietary Filler, Unreinforced, PTFE/Silicone
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

INDUSTRI	200 1000 11/1
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

## **TYPICAL PROPERTY VALUES**

PROPERTIES TYPICAL VALUES UNITS **TEST METHODS** MECHANICAL<sup>(1)</sup> Tensile Stress, yld, Type I, 5 mm/min 43 MPa ASTM D638 43 MPa ASTM D638 Tensile Stress, brk, Type I, 5 mm/min ASTM D638 Tensile Strain, yld, Type I, 5 mm/min 11 % Tensile Strain, brk, Type I, 5 mm/min 14 % ASTM D638 ASTM D638 Tensile Modulus, 50 mm/min 2550 MPa Flexural Stress, yld, 1.3 mm/min, 50 mm span 74 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2300 MPa ASTM D790 ISO 527 Tensile Stress, yield, 5 mm/min 45 MPa 45 MPa ISO 527 Tensile Stress, break, 5 mm/min Tensile Strain, yield, 5 mm/min 17.8 % ISO 527 Tensile Strain, break, 5 mm/min 18.9 % ISO 527 Tensile Modulus, 1 mm/min ISO 527 2680 MPa Flexural Stress, yield, 2 mm/min 74 MPa ISO 178 Flexural Modulus, 2 mm/min 2400 MPa ISO 178 IMPACT (1) 550 Izod Impact, unnotched, 23°C J/m ASTM D4812 Izod Impact, notched, 23°C 30 J/m ASTM D256 Izod Impact, unnotched 80\*10\*4 +23°C 44 kJ/m² ISO 180/1U Izod Impact, notched 80\*10\*4 +23°C ISO 180/1A 4 kJ/m² THERMAL (1) HDT, 1.82 MPa, 3.2mm, unannealed 55 °C ASTM D648 PHYSICAL (1)

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# CHEMISTRY THAT MATTERS



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.4	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.07	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	2.6 – 2.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	2.5 – 2.7	%	ASTM D955
Melt Flow Rate, 250°C/5.0 kgf	62	g/10 min	ASTM D1238
Wear Factor Washer	5	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.33		ASTM D3702 Modified: Manual
Static COF	0.24		ASTM D3702 Modified: Manual
Density	1.4	g/cm <sup>3</sup>	ISO 1183
INJECTION MOLDING <sup>(3)</sup>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 - 230	°C	
Mold Temperature	80 - 100	°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.

#### **MORE INFORMATION**

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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