

# LNPTM LUBRILLOY™ COMPOUND K2000XXL

## DESCRIPTION

LNP LUBRILLOY K2000XXL compound is based on Acetal (POM) copolymer resin containing proprietary, non-PTFE lubrication. Added features include Wear Resistant and Low Extractable.

GENERAL INFORMATION	
Features	Wear resistant, Low Extractable, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Hygiene and Healthcare	General Healthcare
Industrial	Industrial General
Packaging	Food & Beverage

## TYPICAL PROPERTY VALUES

Revision 20240426

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Modulus, 50 mm/min	2384	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	45	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	13	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	17	%	ASTM D638
Tensile Nominal Strain, brk, Type I, 50 mm/min	10	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2040	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	41	J/m	ASTM D256
<b>THERMAL <sup>(1)</sup></b>			
HDT, 1.82 MPa, 3.2mm, unannealed	84	°C	ASTM D648
<b>PHYSICAL <sup>(1)</sup></b>			
Moisture Absorption (23°C / 50% RH)	0.093	%	ISO 62
Mold Shrinkage, flow <sup>(2)</sup>	2.99	%	SABIC method
Mold Shrinkage, xflow <sup>(2)</sup>	2.55	%	SABIC method
Dynamic COF	0.32	-	ASTM D3702 Modified: Manual
Wear Factor (K)	5	10 <sup>-10</sup> in <sup>4</sup> ·5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Melt Flow Rate, 190°C/2.16 kgf	19	g/10 min	ASTM D1238
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	200 – 215	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw speed (Circumferential speed)	30 – 60	m/s	

- (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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