

LNPTM LUBRILLOY™ COMPOUND K8000XXL

DESCRIPTION

LNPTM LUBRILLOY K8000XXL compound is based on Acetal (POM) copolymer resin contain proprietary non-PTFE lubrication. Added features include Wear Resistant, 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
Consumer	Home Appliances
Hygiene and Healthcare	General Healthcare
Industrial	Industrial General
Packaging	Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20240820

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES			
Specific Gravity	1.39	g/cm ³	ISO 1183
MECHANICAL ⁽¹⁾			
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
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	41	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	84	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Moisture Absorption (23°C / 50% RH)	0.093	%	ISO 62
Mold Shrinkage, flow ⁽²⁾	2.99	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	2.55	%	SABIC method
Dynamic COF	0.32	-	ASTM D3702 Modified: Manual
Wear Factor (K)	5	10 ⁻¹⁰ in ⁴ 5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Melt Flow Rate			
190°C/2.16 kgf	19	g/10 min	ASTM D1238

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	200 – 215	°C	
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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.