LNP™ LUBRILOY™ COMPOUND K8000XXL

DESCRIPTION

LNP LUBRILOY 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 20241017

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL PROPERTIES			
Specific Gravity	1.39	g/cm³	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^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.

DISCLAIMER