

LNPT[™] LUBRILOY[™] COMPOUND UF20AXXP

DESCRIPTION

LNPT[™] LUBRILOY[™] UF20AXXP compound is based on Polyphthalamide (PPA) resin containing 50% glass fiber and proprietary lubricant. Added features include; internally lubricated, wear resistant, PTFE not intentionally added.

GENERAL INFORMATION	
Features	Wear and Friction, Lubricated
Fillers	Glass Fiber
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Home Appliances, Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20260330

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	177	MPa	ASTM D638
Tensile Strain, break	3.0	%	ASTM D638
Tensile Modulus, 5 mm/min	17300	MPa	ASTM D638
Flexural Stress	237	MPa	ASTM D790
Flexural Modulus	11900	MPa	ASTM D790
Tensile Stress, break	205	MPa	ISO 527
Tensile Strain, break	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	17400	MPa	ISO 527
Flexural Stress	257	MPa	ISO 178
Flexural Modulus	13200	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	484	J/m	ASTM D4812
Izod Impact, notched, 23°C	73	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	36	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.63	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	2.0 – 3.5	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.5 – 0.8	%	ISO 62
Wear Factor Washer	358	10 ⁻⁴ in ³ /min / ft-lb-hr	ASTM D3702 Modified: Instr.

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dynamic COF	0.56	-	ASTM D3702 Modified: Instr.
Static COF	0.75	-	ASTM D3702 Modified: Instr.
Mold Shrinkage, flow ⁽²⁾	0.2 – 0.4	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.6 – 1.0	%	SABIC method
Melt Volume Rate			
340°C/2.16 kg	18	cm ³ /10 min	ISO 1133
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Maximum Moisture Content	0.15	%	
Melt Temperature	315 – 330	°C	
Rear - Zone 1 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	315 – 325	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Mold Temperature	150 – 170	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	
Drying Time	4	Hrs	

- (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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