LNP™ LUBRILOY™ Compound UC206A

DESCRIPTION

LNP™ LUBRILOY™ UC206A compound is based on Polyphthalamide (PPA) resin containing 30% carbon fiber and proprietary lubricant. Added features include; internally lubricated, wear resistant, PTFE not intentionally added.

GENERAL INFORMATION	
Features	Wear and Friction, Lubricated
Fillers	Carbon 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 20260901

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	245	MPa	ASTM D638
Tensile Strain, break	2.0	%	ASTM D638
Tensile Modulus, 5 mm/min	2200	MPa	ASTM D638
Flexural Stress	274	MPa	ASTM D790
Tensile Stress, break	229	MPa	ISO 527
Tensile Strain, break	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	23400	MPa	ISO 527
Flexural Stress	306	MPa	ISO 178
Flexural Modulus	19100	MPa	ISO 178
Flexural Modulus	15600	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	513	J/m	ASTM D4812
Izod Impact, notched, 23°C	58	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	273	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	6.9E-06	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.1E-05	1/°C	ISO 11359-2
PHYSICAL [1]			
Density	1.28	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	2.0 – 3.0	%	ISO 62-1

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.5 – 0.7	%	ISO 62
Wear Factor Washer	34	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.24	-	ASTM D3702 Modified: Instr.
Static COF	0.42	-	ASTM D3702 Modified: Instr.
Mold Shrinkage, flow [2]	0.2 – 0.4	%	SABIC method
Mold Shrinkage, xflow [2]	0.4 – 0.8	%	SABIC method
Melt Volume Rate			
Melt Volume Rate, MVR at 340°C/5 kg	25	cm³/10 min	ISO 1133
INJECTION MOLDING [3]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
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	

(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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