LNP™ LUBRILOY™ COMPOUND UA200A

UA

DESCRIPTION

LNP LUBRILOY UA200A compound is based on Polyphthalamide (PPA) resin containing aramid fiber and proprietary lubricant. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High temperature resistance, No PFAS intentionally added
Fillers	Aramid Fiber
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood, Automotive Exteriors

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	86	MPa	ASTM D638
Tensile Strain, break	3.3	%	ASTM D638
Tensile Modulus, 50 mm/min	4290	MPa	ASTM D638
Flexural Stress	131	MPa	ASTM D790
Flexural Modulus	3720	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	603	J/m	ASTM D4812
Izod Impact, notched, 23°C	32	J/m	ASTM D256
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	253	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D648
CTE, -40°C to 40°C, flow	4.5E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	5.93E-05	1/°C	ASTM E831
Thermal Conductivity	0.29	W/m-°C	ASTM E1530
PHYSICAL [1]			
Density	1.16	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.42	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.9 – 1.1	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	1.4 – 1.6	%	ASTM D955
Wear Factor Washer	5	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.25	-	ASTM D3702 Modified: Manual
Static COF	0.21	-	ASTM D3702 Modified: Manual
INJECTION MOLDING [3]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15	%	
Melt Temperature	310 – 315	°C	
Front - Zone 3 Temperature	305 – 315	°C	
Middle - Zone 2 Temperature	305 – 315	°C	
Rear - Zone 1 Temperature	305 – 315	°C	
Mold Temperature	120 – 150	°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.

DISCLAIMER