

LNPTM LUBRILOYTM COMPOUND RC206

DESCRIPTION

LNPTM LUBRILOYTM RC206 compound is based on Nylon 6/6 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	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20250731

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, break	236	MPa	ASTM D638
Tensile Strain, break	2.6	%	ASTM D638
Tensile Modulus, 5 mm/min	22600	MPa	ASTM D638
Flexural Stress	340	MPa	ASTM D790
Flexural modulus	18800	MPa	ASTM D790
Tensile Stress, break	236	MPa	ISO 527
Tensile Strain, break	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	22400	MPa	ISO 527
Flexural Stress	331	MPa	ISO 178
Flexural Modulus	18200	MPa	ISO 178
IMPACT (1)			
Izod Impact, unnotched, 23°C	880	J/m	ASTM D4812
Izod Impact, notched, 23°C	112	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	55	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL (1)			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	6.5E-06	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	8.5E-05	1/°C	ISO 11359-2
PHYSICAL (1)			
Density	1.23	g/cm³	ISO 1183



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.4 - 0.6	%	ISO 62
Melt Volume Rate, MVR at 275°C/5 kg	16	cm³/10 min	ISO 1133
Wear Factor Washer	20	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.26	-	ASTM D3702 Modified: Instr.
Static COF	0.51	-	ASTM D3702 Modified: Instr.
Mold Shrinkage, flow ⁽²⁾	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow (2)	0.6 - 0.8	%	SABIC method
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 - 0.25	%	
Melt Temperature	280 – 305	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Mold Temperature	95 – 110	°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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