

LNPT[™] LUBRILLOY[™] COMPOUND RF206AXH

RF-30 HC

DESCRIPTION

LNP LUBRILLOY RF206AXH compound is based on Nylon 6/6 resin containing 30% glass fiber and proprietary lubricant. Added features of this grade include: Wear Resistant, Healthcare.

GENERAL INFORMATION	
Features	Wear resistant, Healthcare/Formula lock, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	121	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.5	%	ASTM D638
Tensile Modulus, 5 mm/min	8760	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	173	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	7060	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	118	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	8460	MPa	ISO 527
Flexural Stress	167	MPa	ISO 178
Flexural Modulus, 2 mm/min	7200	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	690	J/m	ASTM D4812
Izod Impact, notched, 23°C	114	J/m	ASTM D256
Multiaxial Impact	3	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	13	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	35	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	258	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	241	°C	ASTM D648
CTE, -30°C to 30°C, flow	3.8E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	7.5E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	224	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.24	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.38	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.6	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.2	%	ASTM D955
Wear Factor Washer	45	10 ⁻⁴ -10 in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.4	-	ASTM D3702 Modified: Manual
Static COF	0.4	-	ASTM D3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.66	%	ISO 62
INJECTION MOLDING ⁽³⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	270 – 280	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	80 – 95	°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.

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