

LNPT[™] LUBRILLOY[™] COMPOUND RF203XXH

RF-15 HC

DESCRIPTION

LNP LUBRILLOY RF203XXH compound is based on Nylon 6/6 resin containing 15% 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	87	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.7	%	ASTM D638
Tensile Modulus, 5 mm/min	4890	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	128	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4180	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	90	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.8	%	ISO 527
Flexural Stress	140	MPa	ISO 178
Flexural Modulus, 2 mm/min	5500	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	646	J/m	ASTM D4812
Izod Impact, notched, 23°C	83	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	30	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL ⁽²⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	232	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.12	-	ASTM D792
Density	1.13	g/cm ³	ASTM D792
Wear Factor Washer	70	10 ⁻⁴ -10 in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D3702 Modified: Manual
Static COF	0.3	-	ASTM D3702 Modified: Manual

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.13	g/cm ³	ISO 1183
INJECTION MOLDING ⁽²⁾			
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) 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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