



LNPT™ LUBRILOY™ COMPOUND RX18020

REGION EUROPE

DESCRIPTION

LNPT™ LUBRILOY™ RX18020 is a compound based on PA 66 resin containing Glass Fiber, Proprietary Lubricant. Added features include; Internally Lubricated,

GENERAL INFORMATION	
Applications	Structure
Features	Wear resistant, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Modulus, 1 mm/min	6100	MPa	ISO 527
Tensile Stress, break, 5 mm/min	121	MPa	ISO 527
Tensile Strain, break, 5 mm/min	4	%	ISO 527
Flexural Modulus, 2 mm/min	4800	MPa	ISO 178
Flexural Strength, 2 mm/min	174	MPa	ISO 178
Tensile Modulus, 5 mm/min	6200	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	118	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	4	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	4600	MPa	ASTM D790
Flexural Strength, 1.3 mm/min, 50 mm span	160	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	53	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	65	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	60	J/m	ASTM D256
Izod Impact, unnotched, 23°C	757	J/m	ASTM D4812
THERMAL ⁽¹⁾			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	231	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	255	°C	ISO 75/Bf
Vicat Softening Temp, Rate B/50	244	°C	ISO 306
Vicat Softening Temp, Rate B/120	246	°C	ISO 306
CTE, 23°C to 60°C, flow	3.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	9.6E-05	1/°C	ISO 11359-2
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	257	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL ⁽¹⁾			
Density	1.21	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.2 – 0.4	%	ISO 62
Melt Volume Rate, MVR at 300°C/ 1.2 kg	69	cm ³ /10 min	ISO 1133
Specific Gravity	1.21	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1 – 0.2	%	ASTM D570
Wear Factor Washer	8	10 ⁻⁴ in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.34	-	ASTM D3702 Modified: Manual
Static COF	0.51	-	ASTM D3702 Modified: Manual
Mold Shrinkage, flow	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow	1.1 – 1.3	%	SABIC method
FLAME CHARACTERISTICS ⁽²⁾			
Glow Wire Ignitability Temperature, 1.5 mm	700	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.0 mm	700	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 0.8 mm	700	°C	IEC 60695-2-13
Glow Wire Flammability Index, 1.5 mm	675	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.0 mm	675	°C	IEC 60695-2-12
Glow Wire Flammability Index, 0.8 mm	675	°C	IEC 60695-2-12
INJECTION MOLDING ⁽³⁾			
Drying Temperature	95 – 100	°C	
Drying Time	6 – 8	Hrs	
Drying Time (Cumulative)	12	Hrs	
Melt Temperature	250 – 280	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Middle - Zone 2 Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Nozzle Temperature	255 – 275	°C	
Mold Temperature	60 – 90	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	
Vent Depth	0.025 – 0.076	mm	
Shot to Cylinder Size	40 – 60	%	