SABIC Innovative Plastics™



LNP* Lubriloy* Compound RX05497 Americas: COMMERCIAL

Also known as: RW

Product Reorder Name: RX05497

LNP LUBRILOY* RX05497 is a compound based on Nylon 66 resin containing Proprietary Lubricant. Added features of this material include: Internally Lubricated.

Property

TYPICAL PROPERTIES (1)					
MECHANICAL	Value	Unit	Standard		
Tensile Stress, yield	82	MPa	ASTM D 638		
Tensile Stress, break	67	MPa	ASTM D 638		
Tensile Strain, yield	5.2	%	ASTM D 638		
Tensile Strain, break	24.4	%	ASTM D 638		
Tensile Modulus, 50 mm/min	3040	MPa	ASTM D 638		
Flexural Stress	105	MPa	ASTM D 790		
Flexural Modulus	2790	MPa	ASTM D 790		
Tensile Stress, yield	69	MPa	ISO 527		
Tensile Stress, break	57	MPa	ISO 527		
Tensile Strain, yield	17.2	%	ISO 527		
Tensile Strain, break	31.4	%	ISO 527		
Tensile Modulus, 1 mm/min	2730	MPa	ISO 527		
Flexural Stress	90	MPa	ISO 178		
Flexural Modulus	2430	MPa	ISO 178		
IMPACT	Value	Unit	Standard		
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812		
Izod Impact, notched, 23°C	64	J/m	ASTM D 256		
Instrumented Impact Energy @ peak, 23°C	60	J	ASTM D 3763		
Multiaxial Impact	76	J	ISO 6603		
Izod Impact, unnotched 80*10*4 +23°C	137	kJ/m²	ISO 180/1U		
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A		
THERMAL	Value	Unit	Standard		
HDT, 1.82 MPa, 3.2mm, unannealed	58	°C	ASTM D 648		

CTE, -40°C to 40°C, flow	9.86E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.12E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.86E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.13E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	58	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.12	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.88	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	2.3 - 2.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	2.3 - 2.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	2.31 - 2.52	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	2.31 - 2.52	%	ISO 294
Wear Factor Washer	10	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.3	-	ASTM D 3702 Modified
Static COF	0.16	-	ASTM D 3702 Modified
Density	1.12	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.18	%	ISO 62

Source GMD, last updated:09/30/2004

Processing

Parameter					
Injection Molding	Value	Unit			
Drying Temperature	80	°C			
Drying Time	4	hrs			
Maximum Moisture Content	0.15 - 0.25	%			
Melt Temperature	280 - 305	°C			
Front - Zone 3 Temperature	295 - 305	°C			
Middle - Zone 2 Temperature	280 - 295	°C			
Rear - Zone 1 Temperature	265 - 275	°C			
Mold Temperature	95 - 110	°C			
Back Pressure	0.2 - 0.3	MPa			
Screw Speed	30 - 60	rpm			

Source GMD, last updated:09/30/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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