

LNP* Lubricomp* Compound RFL36U

Americas: COMMERCIAL

Also known as: LUBRICOMP RFL-4036 UV BK8-666
Product Reorder Name: RFL36U

LNP* Lubricomp RFL36U is a Nylon 6/6 compound containing PTFE and Glass Fiber. Characteristics of this grade are Internally Lubricated and UV Stabilized.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	160	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	160	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	11660	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	233	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	233	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9260	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	168	MPa	ISO 527
Tensile Stress, break, 5 mm/min	158	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.8	%	ISO 527
Tensile Strain, break, 5 mm/min	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	10440	MPa	ISO 527
Flexural Stress	219	MPa	ISO 178
Flexural Modulus, 2 mm/min	8890	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	880	J/m	ASTM D 4812
Izod Impact, notched, 23°C	74	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	8	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	54	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	249	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.42E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.85E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	244	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.54	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.37	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Wear Factor Washer	5	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified

Dynamic COF	0.67	-	ASTM D 3702 Modified
Static COF	0.61	-	ASTM D 3702 Modified
Density	1.54	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.58	%	ISO 62

Source GMD, last updated:2009/04/21

Processing

Parameter	Value	Unit
Injection Molding		
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:2009/04/21

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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