

## LNP\* Lubricomp\* Compound QL004

Americas: COMMERCIAL

Also known as: LUBRICOMP QL-4040  
Product Reorder Name: QL004

LNP\* Lubricomp\* QL-4040 is a Nylon 6/10 containing PTFE.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	53	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	53	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	14.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	15.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	2430	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	1710	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	53	MPa	ISO 527
Tensile Stress, break, 5 mm/min	52	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	10.8	%	ISO 527
Tensile Strain, break, 5 mm/min	11.4	%	ISO 527
Tensile Modulus, 1 mm/min	2480	MPa	ISO 527
Flexural Stress	50	MPa	ISO 178
Flexural Modulus, 2 mm/min	2320	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	675	J/m	ASTM D 4812
Izod Impact, notched, 23°C	39	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	3	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	181	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	56	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.1E-04	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.1E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	170	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	60	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.2	-	ASTM D 792
Density	1.2	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.26	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.37	%	ISO 62

Source GMD, last updated:08/22/2008

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:08/22/2008

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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