

## LNP\* Lubricomp\* Compound Cycoloy\_C6303

Americas: COMMERCIAL

LNP\* Lubricomp\* Cycoloy\_C6303 compound is a Wear resistant (5% PTFE), flame retardant PC+ABS. High heat and good hydrolytic stability. UL listing from Japan and Pacific.

## **Property**

TYPICAL PROPERTIES (1)				
MECHANICAL	Value	Unit	Standard	
Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D 638	
Tensile Stress, brk, Type I, 50 mm/min	51	MPa	ASTM D 638	
Tensile Strain, yld, Type I, 50 mm/min	4.5	%	ASTM D 638	
Tensile Strain, brk, Type I, 50 mm/min	30	%	ASTM D 638	
Tensile Modulus, 50 mm/min	2680	MPa	ASTM D 638	
Flexural Stress, yld, 1.3 mm/min, 50 mm span	106	MPa	ASTM D 790	
Flexural Modulus, 1.3 mm/min, 50 mm span	2750	MPa	ASTM D 790	
Tensile Stress, yield, 5 mm/min	100	MPa	ISO 527	
Tensile Stress, yield, 50 mm/min	65	MPa	ISO 527	
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527	
Tensile Strain, yield, 5 mm/min	6	%	ISO 527	
Tensile Strain, yield, 50 mm/min	4.6	%	ISO 527	
Tensile Strain, break, 50 mm/min	22	%	ISO 527	
Tensile Modulus, 1 mm/min	2870	MPa	ISO 527	
Flexural Modulus, 2 mm/min	2600	MPa	ISO 178	
IMPACT	Value	Unit	Standard	
Izod Impact, notched, 23°C	96	J/m	ASTM D 256	
Instrumented Impact Total Energy, 23°C	48	J	ASTM D 3763	
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A	
THERMAL	Value	Unit	Standard	
Vicat Softening Temp, Rate B/50	117	°C	ASTM D 1525	
HDT, 0.45 MPa, 3.2 mm, unannealed	109	°C	ASTM D 648	
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648	
HDT, 1.82 MPa, 6.4 mm, unannealed	102	°C	ASTM D 648	
CTE, -40°C to 40°C, flow	6.3E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ASTM E 831	
CTE, 23°C to 80°C, flow	6.5E-05	1/°C	ISO 11359-2	
CTE, 23°C to 80°C, xflow	6.8E-05	1/°C	ISO 11359-2	
Vicat Softening Temp, Rate B/120	117	°C	ISO 306	
Relative Temp Index, Elec	60	°C	UL 746B	
Relative Temp Index, Mech w/impact	60	°C	UL 746B	
Relative Temp Index, Mech w/o impact	60	°C	UL 746B	
PHYSICAL	Value	Unit	Standard	
Specific Gravity	1.25	-	ASTM D 792	
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method	
Melt Flow Rate, 260°C/2.16 kgf	10	g/10 min	ASTM D 1238	
Melt Flow Rate, 260°C/5.0 kgf	50	g/10 min	ASTM D 1238	
ELECTRICAL	Value	Unit	Standard	

Hot Wire Ignition (PLC)	3	PLC Code	UL 746A	
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A	
FLAME CHARACTERISTICS	Value	Unit	Standard	
UL Recognized, 94V-1 Flame Class Rating (3)	1.19	mm	UL 94	
UL Recognized, 94V-0 Flame Class Rating (3)	1.49	mm	UL 94	
UL Recognized, 94-5VB Rating (3)	2.48	mm	UL 94	

Source GMD, last updated:10/28/2002

## **Processing**

Parameter		
Injection Molding	Value	Unit
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	245 - 275	°C
Nozzle Temperature	245 - 275	°C
Front - Zone 3 Temperature	245 - 275	°C
Middle - Zone 2 Temperature	220 - 265	°C
Rear - Zone 1 Temperature	220 - 255	°C
Mold Temperature	60 - 80	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	30 - 80	%
Vent Depth	0.038 - 0.076	mm

Source GMD, last updated:10/28/2002

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.

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- (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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