

# LNP™ LUBRICOMP™ DL002ER compound

Polycarbonate

SABIC Innovative Plastics

## Message:

LNP LUBRICOMP DL002ER is a compound based on Polycarbonate resin containing PTFE. Added features of this material include: Internally Lubricated, Easy Molding, Mold Release.

Also known as: LNP\* LUBRICOMP\* Compound DL-4020 EM MR

Product reorder name: DL002ER

General Information			
Additive	PTFE lubricant demoulding		
Features	Good formability Lubrication		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm <sup>3</sup>	ASTM D792, ISO 1183
Molding Shrinkage			
Flow: 24 hours	0.60 - 0.80	%	ASTM D955
Transverse flow: 24 hours	0.70 - 0.90	%	ASTM D955
Vertical flow direction: 24 hours	0.79	%	ISO 294-4
Flow direction: 24 hours	0.70	%	ISO 294-4
Water Absorption (24 hr, 50% RH)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- <sup>1</sup>	2070	MPa	ASTM D638
--	2200	MPa	ISO 527-2/1
Tensile Strength			
Yield	55.8	MPa	ASTM D638
Yield	56.0	MPa	ISO 527-2
Fracture	49.0	MPa	ASTM D638
Fracture	46.0	MPa	ISO 527-2
Tensile Elongation			
Yield	5.9	%	ASTM D638
Yield	5.8	%	ISO 527-2
Fracture	66	%	ASTM D638
Fracture	71	%	ISO 527-2
Flexural Modulus			
--	2070	MPa	ASTM D790

--	2200	MPa	ISO 178
Flexural Stress	73.0	MPa	ISO 178
Coefficient of Friction			ASTM D3702 Modified
With self-dynamics	0.24		ASTM D3702 Modified
With Self-Static	0.075		ASTM D3702 Modified
Wear Factor - Washer	34.5	10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr	ASTM D3702 Modified
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact			
23°C	130	J/m	ASTM D256
23°C <sup>2</sup>	12	kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact			
23°C	2500	J/m	ASTM D4812
23°C <sup>3</sup>	170	kJ/m <sup>2</sup>	ISO 180/1U
Instrumented Dart Impact			
23°C, Energy at Peak Load	40.2	J	ASTM D3763
--	44.3	J	ISO 6603-2
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	135	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span <sup>4</sup>	135	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	124	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span <sup>5</sup>	125	°C	ISO 75-2/Af
Linear thermal expansion coefficient			
Flow: -40 to 40°C	7.6E-5	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	7.5E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	7.2E-5	cm/cm/°C	ASTM E831, ISO 11359-2
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Drying Temperature	121	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	293 - 304	°C	
Middle Temperature	304 - 316	°C	
Front Temperature	310 - 321	°C	
Processing (Melt) Temp	299 - 316	°C	
Mold Temperature	82.2 - 110	°C	
Back Pressure	0.172 - 0.344	MPa	
Screw Speed	30 - 60	rpm	
<b>NOTE</b>			
1.	50 mm/min		
2.	80*10*4		
3.	80*10*4		
4.	80*10*4 mm		

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#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

