

# LNP™ LUBRICOMP™ Compound DFL34

Polycarbonate  
SABIC

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## Technical Data

### Product Description

LNP LUBRICOMP DFL34 compound is based on Polycarbonate (PC) resin containing 20% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant.

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• SABIC Material Solutions For Conveyor Systems • SABIC Material Solutions for Home Appliances
UL Yellow Card <sup>2</sup>	• E121562-101344537
Search for UL Yellow Card	• SABIC • LNP™ LUBRICOMP™ Compound
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight • PTFE, 15% Filler by Weight
Features	• Wear Resistant
Uses	• Aircraft Interiors • Computer Components • Appliances • Electrical Parts • Building Materials • Electrical/Electronic Applications • Cell Phones • Medical Devices • Personal Care • Sporting Goods • Surgical Instruments • Wire & Cable Applications
Processing Method	• Injection Molding

### Physical

	Nominal Value Unit	Test Method
Density / Specific Gravity		
--	• 1.45	ASTM D792
--	• 1.45 g/cm <sup>3</sup>	
--	1.45 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/2.16 kg)	8.8 g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/2.16 kg)	5.0 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage		Internal Method
Flow	0.20 to 0.40 %	
Across Flow	0.30 to 0.60 %	
Water Absorption		
24 hr, 23°C	0.10 to 0.20 %	ASTM D570 ISO 62
24 hr, 23°C, 50% RH	0.10 to 0.20 %	ASTM D570
Equilibrium, 23°C, 50% RH	0.10 to 0.20 %	ISO 62

### Mechanical

	Nominal Value Unit	Test Method
Tensile Modulus		
-- <sup>4</sup>	6600 MPa	ASTM D638
--	6600 MPa	ISO 527-1/1
Tensile Strength		
Break <sup>5</sup>	95.0 MPa	ASTM D638
Break	97.0 MPa	ISO 527-2/5
Tensile Elongation		
Break <sup>5</sup>	3.3 %	ASTM D638
Break	2.8 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span <sup>6</sup>	5600 MPa	ASTM D790
-- <sup>7</sup>	6000 MPa	ISO 178



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Mechanical	Nominal Value Unit	Test Method
Flexural Strength		
50.0 mm Span <sup>6</sup>	148 MPa	ASTM D790
-- <sup>7</sup>	150 MPa	ISO 178
Coefficient of Friction <sup>8</sup>		ASTM D3702
Dynamic	0.48	
Static	0.64	
Wear Factor <sup>8</sup>	150 10 <sup>-8</sup> mm <sup>3</sup> /N·m	ASTM D3702
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength <sup>9</sup> (23°C)	21 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength <sup>9</sup> (23°C)	61 kJ/m <sup>2</sup>	ISO 179/1eU
Notched Izod Impact		
23°C	150 J/m	ASTM D256
23°C <sup>10</sup>	15 kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact		
23°C	700 J/m	ASTM D4812
23°C <sup>10</sup>	49 kJ/m <sup>2</sup>	ISO 180/1U
Instrumented Dart Impact		
23°C, Energy at Peak	22.0 J	ASTM D3763
--	7.00 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	147 °C	ASTM D648
0.45 MPa, Unannealed, 4.00 mm, 64.0 mm Span <sup>10</sup>	146 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	143 °C	ASTM D648
1.8 MPa, Unannealed, 4.00 mm, 64.0 mm Span <sup>10</sup>	142 °C	ISO 75-2/Af
Vicat Softening Temperature		
--	148 °C	ASTM D1525 <sup>11</sup> ISO 306/B50 <sup>11</sup>
--	150 °C	ISO 306/B120
CLTE		
Flow : -40 to 40°C	2.8E-5 cm/cm/°C	ASTM E831 ISO 11359-2
Flow : 23 to 60°C	2.5E-5 cm/cm/°C	ISO 11359-2
Transverse : -40 to 40°C	6.6E-5 cm/cm/°C	ASTM E831 ISO 11359-2
Transverse : 23 to 60°C	7.8E-5 cm/cm/°C	ISO 11359-2
RTI Elec	80.0 °C	UL 746B
RTI Imp	80.0 °C	UL 746B
RTI Str	80.0 °C	UL 746B
Electrical	Nominal Value Unit	Test Method
Comparative Tracking Index (CTI)	PLC 3	UL 746A
High Amp Arc Ignition (HAI) (> 3.0 mm)	PLC 2	UL 746A
Hot-wire Ignition (HWI) (> 3.0 mm)	PLC 0	UL 746A
Flammability	Nominal Value Unit	Test Method
Flame Rating (> 3.0 mm)	V-1	UL 94
Injection	Nominal Value Unit	
Drying Temperature	120 °C	
Drying Time	4.0 hr	
Suggested Max Moisture	0.020 %	
Rear Temperature	295 to 305 °C	
Middle Temperature	310 to 320 °C	



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Injection	Nominal Value Unit
Front Temperature	320 to 330 °C
Processing (Melt) Temp	305 to 325 °C
Mold Temperature	80 to 110 °C
Back Pressure	0.200 to 0.300 MPa
Screw Speed	30 to 60 rpm

## Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 5.0 mm/min

<sup>5</sup> Type I, 5.0 mm/min

<sup>6</sup> 1.3 mm/min

<sup>7</sup> 2.0 mm/min

<sup>8</sup> Modified: Manual

<sup>9</sup> 80\*10\*4 sp=62mm

<sup>10</sup> 80\*10\*4 mm

<sup>11</sup> Rate A (50°C/h), Loading 2 (50 N)



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## Where to Buy

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### Supplier

**SABIC**

Web: <http://www.sabic.com/>



**Distributor****AECTRA**

Telephone: +33-4-72-54-36-42

Web: <https://www.aectra.fr/>

Availability: Bulgaria, Romania

**AGI-Augusto Guimarães & Irmão**

Telephone: +351-22753-7400

Web: <https://www.agi.pt/en/>

Availability: Portugal

**Amco Polymers**

Telephone: 800-262-6685

Web: <http://www.amcopolymers.com/>

Availability: North America

**Chase Plastic Services, Inc.***Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: <http://www.chaseplastics.com/contact/locations>*

Telephone: 800-232-4273

Web: <http://www.chaseplastics.com/>

Availability: North America

**GRÄSSLIN**

Telephone: +49-7721-4040-261

Web: <https://www.graesslin-kunststoffe.de>

Availability: Germany

**Guangzhou Hua Xiu Plastics Co. Ltd**

Telephone: +86-20-82582555

Web: <http://www.va-so.cn/>

Availability: Asia Pacific

**Guzmán Polymers**

Telephone: +34-963-992-400

Web: <https://www.guzmanglobal.com/en/productos/plastics/>

Availability: Italy, Spain, Turkey

**Lenorplastics**

Telephone: +41-61-706-11-11

Web: <https://www.lenorplastics.ch>

Availability: Switzerland

**Nexeo Plastics***Nexeo Plastics is leading global resin distributor with the technical resources you need to overcome material challenges. Visit us on the web at [www.nexeoplastics.com](http://www.nexeoplastics.com).*

Telephone: 833-446-3936

Web: <https://www.nexeoplastics.com/>

Availability: North America

**Plastoplan**

Telephone: +43-1-25040-0

Web: <https://www.plastoplan.com/>

Availability: Austria, Czech Republic, Hungary, Slovakia

**POLYMIX***POLYMIX is a Pan European distribution company. Contact POLYMIX for availability of individual products by country.*

Telephone: +33-3-8920-1380

Web: <http://www.polymix.eu/>

Availability: France

**Ultrapolymers***Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

Telephone: +32-11-57-95-57

Web: <http://www.ultrapolymers.com/>

Availability: Belgium, Netherlands

