

# LNPTM LUBRICOMPTM COMPOUND DFL16E

## DFL-4016 EM

#### DESCRIPTION

LNP LUBRICOMP DFL16E compound is based on Polycarbonate (PC) resin containing 30% glass fiber and 5% PTFE. Added features of this grade include: Wear Resistant, Easy Molding.

GENERAL INFORMATION	
Features	Good Processability, Wear resistant
Fillers	Glass Fiber, PTFE
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

### TYPICAL PROPERTY VALUES

McCHANICAL <sup>(1)</sup> STM D63Tensile Stress, break100MPaASTM D638Tensile Strain, break2%ASTM D638Tensile Modulus, 5 mm/min8810MPaASTM D638Flexural Stress151MPaASTM D790Flexural Modulus720MPaASTM D790Impact <sup>(1)</sup> Jamma StressJamma StressIzod Impact, unnotched, 23°C655JimaASTM D581Izod Impact, notched, 23°C90JimaASTM D638HTERMAL <sup>(1)</sup> Jamma StressJamma StressHDT, 182 MPA, 3.2mm, unannealed10%ASTM D638HYSICAL <sup>(1)</sup> Jamma StressJamma StressHO1 AstM ReferenceJamma StressJamma StressHO1 AstM ReferenceJamma StressJamma StressHUSION Carl (1)Jamma StressJamma StressHYSICAL <sup>(1)</sup> Jamma StressJamma StressHUSION Carl (1)Jamma StressJamma StressHUSION Carl (2)Jamma StressJamma StressHUSION Carl (1)Jamma StressJamma St	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Yrani, Dereak23ATM D638Tensile Krain, Dereak8810MPaATM D638Tensile Kodulus, 5 mm/min8810MPaATM D638Flexural Stress151MPaATM D790Flexural Modulus0920MPaATM D790Internation1920MPaATM D790Internation1920MPaATM D790Internation1920MPaATM D790Internation1920MPaATM D4812Internation1920MPaATM D4812Internation1920MPaATM D4812Internation1920MPaATM D4812Internation1920MPaATM D4812Internation1920MPaATM D4812Internation1920MPaATM D4812Internation19201920ATM D4812Internation19201920ATM D4812Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation192019201920Internation1920 <td>MECHANICAL<sup>(1)</sup></td> <td></td> <td></td> <td></td>	MECHANICAL <sup>(1)</sup>			
Tensile Modulus, 5 mm/min8810MPaASTM D638Flexural Stress151MPaASTM D790Flexural Modulus7920MPaASTM D790IMPACT <sup>(1)</sup>	Tensile Stress, break	100	MPa	ASTM D638
Fiexual NotaNameASTM D790Fiexual ModulusNamoASTM D790Impact (1)Stand DataASTM D790tool Impact, notched, 23°CSoft Or Soft	Tensile Strain, break	2	%	ASTM D638
Fexual ModulusNPAASM D790InpactSympositiveSympositiveIt collipact, unotched, 23°CSigSigSigIt collipact, notched, 23°CSig </td <td>Tensile Modulus, 5 mm/min</td> <td>8810</td> <td>MPa</td> <td>ASTM D638</td>	Tensile Modulus, 5 mm/min	8810	MPa	ASTM D638
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izod Impact, unnotched, 23°C655J/mATM D4812izod Impact, orded, 23°C90J/mATM D256THERMAL <sup>(1)</sup> HDT, 1.82 MPa, 3.2mm, unannealed140°CATM D648prysicaL <sup>(1)</sup> °CSTM D648-Density15GrandSTM D72Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2 0.4 0.4 0.4 0.4 0.4 0.4 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	Flexural Modulus	7920	MPa	ASTM D790
izod impact, notched, 23°C90J/mASTM D256tHERMAL <sup>(1)</sup> 7ASTM D256tHERMAL <sup>(1)</sup> °CASTM D648HDT, 1.82 MPa, 3.2mm, unannealed140°CASTM D648pHysicAL <sup>(1)</sup> °CASTM D648pHysicAL <sup>(1)</sup> 99ASTM D648pHysicAL <sup>(1)</sup> 99ASTM D648pHysicAL <sup>(1)</sup> 99ASTM D648pHysicAL <sup>(1)</sup> 999pHysicAL <sup>(1)</sup> 99physicAL <sup>(1)</sup> 9physicAL <sup>(1)</sup> 9<	IMPACT <sup>(1)</sup>			
THERMAL <sup>(1)</sup> President of the second se	Izod Impact, unnotched, 23°C	655	J/m	ASTM D4812
HDT, 1.82 MPa, 3.2mm, unannealed140°CASTM D648PHYSICAL <sup>(1)</sup> JJJJDensityJJJASTM D792Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2 - 0.4 -	Izod Impact, notched, 23°C	90	J/m	ASTM D256
PHYSICAL <sup>(1)</sup> Information of the second	THERMAL <sup>(1)</sup>			
Density     1.5     g/cm³     ASTM D792       Mold Shrinkage, flow, 24 hrs <sup>(2</sup> )     0.2 - 0.4     %     ASTM D955       FLAME CHARACTERISTICS <sup>(3)</sup> 5     5     5       UL Yellow Card Link 2     6207780-103445897     -	HDT, 1.82 MPa, 3.2mm, unannealed	140	°C	ASTM D648
Mold Shrinkage, flow, 24 hrs     (2)     0.2 – 0.4     %     ASTM D955       FLAME CHARACTERISTICS     S	PHYSICAL <sup>(1)</sup>			
FLAME CHARACTERISTICS <sup>(3)</sup> UL Yellow Card Link   E121562-101344609   ·   ·   ·     UL Yellow Card Link 2   E207780-101344587   ·   ·   ·   ·     UL Recognized, 94V-1 Flame Class Rating   ·	Density	1.5	g/cm <sup>3</sup>	ASTM D792
UL Yellow Card Link   E121562-101344609   ·   ·   ·     UL Yellow Card Link 2   E207780-101344587   ·   ·   ·   ·     UL Recognized, 94V-1 Flame Class Rating   · <t< td=""><td>Mold Shrinkage, flow, 24 hrs<sup>(2)</sup></td><td>0.2 – 0.4</td><td>%</td><td>ASTM D955</td></t<>	Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.2 – 0.4	%	ASTM D955
UL Yellow Card Link 2     E207780-101344587     -     -       UL Recognized, 94V-1 Flame Class Rating     ≥3     mm     UL 94       INJECTION MOLDING <sup>(4)</sup> UL 94     UL 94     UL 94	FLAME CHARACTERISTICS <sup>(3)</sup>			
UL Recognized, 94V-1 Flame Class Rating ≥3 mm UL 94   INJECTION MOLDING <sup>(4)</sup>	UL Yellow Card Link	<u>E121562-101344609</u>	-	
INJECTION MOLDING <sup>(4)</sup>	UL Yellow Card Link 2	E207780-101344587	-	
	UL Recognized, 94V-1 Flame Class Rating	≥3	mm	UL 94
Drying Temperature 120 °C	INJECTION MOLDING (4)			
	Drying Temperature	120	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 - 330	°C	
Middle - Zone 2 Temperature	310 - 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 - 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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