

LNPT[™] LUBRICOMP[™] COMPOUND LFL36E

LFL-4036 EM

DESCRIPTION

LNP LUBRICOMP LFL36E compound is based on Polyetheretherketone (PEEK) resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant, Easy Molding.

GENERAL INFORMATION

Features	Good Processability, Wear resistant, High stiffness/Strength, High temperature resistance
Fillers	Glass Fiber, PTFE
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY

Building and Construction
Consumer
Electrical and Electronics
Industrial

SUB INDUSTRY

Building Component
Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Mobile Phone - Computer - Tablets
Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	176	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	170	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	263	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	11700	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	177	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	12240	MPa	ISO 527
Flexural Modulus, 2 mm/min	11360	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	861	J/m	ASTM D4812
Izod Impact, notched, 23°C	103	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	13	J	ASTM D3763
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	339	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	327	°C	ASTM D648
CTE, -30°C to 30°C, flow	1.8E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	3.6E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	337	°C	ISO 75/Bf

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	322	°C	ISO 75 /Af
PHYSICAL ⁽¹⁾			
Density	1.64	g/cm ³	ASTM D792
Wear Factor Washer	64	10 ⁴ -10 in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	9	10 ⁴ -10 in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.49	-	ASTM D3702 Modified: Manual
Static COF	0.73	-	ASTM D3702 Modified: Manual
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101283797	-	-
UL Recognized, 94V-0 Flame Class Rating	0.8	mm	UL 94
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	380 – 390	°C	
Front - Zone 3 Temperature	380 – 395	°C	
Middle - Zone 2 Temperature	365 – 375	°C	
Rear - Zone 1 Temperature	350 – 360	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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) 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.

(3) 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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.