LNP™ LUBRICOMP™ COMPOUND EFL34HL

EFL-4034 LE

DESCRIPTION

LNP LUBRICOMP EFL34HL compound is based on Polyetherimide (PEI) resin containing 20% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant, Low Extractable.

This material is food contact compliant in most jurisdictions – exceptions may exist, request a declaration for details.

GENERAL INFORMATION	
Features	Wear resistant, Food contact, Healthcare/Formula lock, High temperature resistance
Fillers	Glass Fiber, PTFE
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Home Appliances
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging, Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20250317

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	113	MPa	ASTM D638
Tensile Strain, break	2.2	%	ASTM D638
Tensile Modulus, 50 mm/min	7580	MPa	ASTM D638
Flexural Stress	179	MPa	ASTM D790
Flexural Modulus	7510	MPa	ASTM D790
Tensile Stress, break	113	MPa	ISO 527
Tensile Strain, break	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	7400	MPa	ISO 527
Flexural Stress	181	MPa	ISO 178
Flexural Modulus	7940	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	480	J/m	ASTM D4812
Izod Impact, notched, 23°C	69	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	8	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	20	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	203	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	204	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.54	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.17	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.6	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	0.33	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.6	%	ISO 294
Density	1.54	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.23	%	ISO 62
INJECTION MOLDING [3]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 375	°C	
Rear - Zone 1 Temperature	355 – 365	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Nozzle Temperature	365 – 375	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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) 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