LNP™ LUBRICOMP™ COMPOUND ZFG26

ZFL-4326

DESCRIPTION

LNP LUBRICOMP ZFG26 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 30% glass fiber, 10% graphite. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber, Graphite
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	109	MPa	ASTM D638
Tensile Stress, break	115	MPa	ASTM D638
Tensile Strain, yield	1.5	%	ASTM D638
Tensile Strain, break	1.5	%	ASTM D638
Tensile Modulus, 5 mm/min	13100	MPa	ASTM D638
Flexural Stress	165	MPa	ASTM D790
Flexural Modulus	10480	MPa	ASTM D790
Tensile Stress, yield	109	MPa	ISO 527
Tensile Stress, break	109	MPa	ISO 527
Tensile Strain, yield	1.5	%	ISO 527
Tensile Strain, break	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	10480	MPa	ISO 527
Flexural Stress	163	MPa	ISO 178
Flexural Modulus	10000	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	377	J/m	ASTM D4812
Izod Impact, notched, 23°C	80	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	6	J	ASTM D3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m²	ISO 180/1U

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	135	°C	ASTM D648
CTE, -40°C to 40°C, flow	2.16E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	4.68E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	2.20E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.70E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.42	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.06	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	0.36	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.73	%	ISO 294
Wear Factor Washer	113	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.62	-	ASTM D3702 Modified: Manual
Static COF	0.89	-	ASTM D3702 Modified: Manual
Density	1.37	g/cm³	ISO 1183
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Melt Temperature	300 – 305	°C	
Front - Zone 3 Temperature	300 – 310	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	275 – 290	°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) 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