LNP™ LUBRICOMP™ COMPOUND ZL003

ZL-4030
REGION ASIA

DESCRIPTION

LNP LUBRICOMP ZL003 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced, PTFE
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 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	47	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	8.5	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	8.9	%	ASTM D638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D638
Flexural modulus	2750	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	75	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2750	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	48	MPa	ISO 527
Tensile Stress, break, 5 mm/min	48	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	8.1	%	ISO 527
Tensile Strain, break, 5 mm/min	8.3	%	ISO 527
Tensile Modulus, 1 mm/min	2250	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	2000	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	267	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	17	kJ/m²	ISO 180/1U

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	128	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	117	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	130	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	119	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.15	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	0.83	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.87	%	ISO 294
Wear Factor Washer	11	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.28	-	ASTM D3702 Modified: Manual
Static COF	0.2	-	ASTM D3702 Modified: Manual
Density	1.15	g/cm³	ISO 1183
FLAME CHARACTERISTICS [3]			
UL Yellow Card Link	E207780-103093735	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING [4]			
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) 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.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

DISCLAIMER