LNP™ LUBRICOMP™ COMPOUND WL004

WL-4040
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP WL004 compound is based on Polybutylene Terephthalate (PBT) resin containing 20% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced, PTFE
Polymer Types	Polybutylene Terephthalate (PBT)
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

Revision 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	41	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	12.2	%	ISO 527
Tensile Modulus, 1 mm/min	2420	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	68	MPa	ISO 178
Flexural Strain, break, 2 mm/min	6	%	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	7	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	7	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	21	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	14	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	800	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	500	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	27	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	1.17E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.07E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	153	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	61	°C	ISO 75/Af
Relative Temp Index, Elec [2]	75	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	75	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	75	°C	UL 746B
PHYSICAL [1]			
Mold Shrinkage, flow [3]	1 – 1.7	%	SABIC method
Mold Shrinkage, xflow [3]	0.8 – 1.7	%	SABIC method
Wear Factor Washer	58	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.33	-	ASTM D3702 Modified: Manual
Static COF	0.24	-	ASTM D3702 Modified: Manual
Density	1.43	g/cm³	ISO 1183
Melt Volume Rate, MVR at 250°C/2.16 kg	18 – 21	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101282617	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°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) 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) 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.
(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