LNP™ LUBRILOY™ COMPOUND DX08333

DESCRIPTION

LNP LUBRILOY DX08333 compound is based on Polycarbonate (PC) resin containing proprietary lubricant and carbon fiber. Added features of this grade include: ESD Safe, PTFE-free Wear & Friction Solution and Balanced Mechanical Performance.

GENERAL INFORMATION	
Features	Electrically Conductive, Wear resistant, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
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 20241028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	72	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D638
Tensile Modulus, 5 mm/min	7300	MPa	ASTM D638
Flexural Stress	99	MPa	ASTM D790
Flexural Modulus	6100	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	113	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	7310	MPa	ISO 527
Flexural Stress	113	MPa	ISO 178
Flexural Modulus, 2 mm/min	6760	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	296	J/m	ASTM D4812
Izod Impact, notched, 23°C	60	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	17	J	ASTM D3763
Multiaxial Impact	10	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	22	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	138	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	132	°C	ASTM D648
CTE, -40°C to 40°C, flow	3.5E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	4.9E-05	1/°C	ASTM E831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	140	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Af
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
PHYSICAL [1]			
Density	1.32	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow [3]	0.35	%	SABIC method
Mold Shrinkage, xflow [3]	0.5	%	SABIC method
Wear Factor Washer	80	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
ELECTRICAL [1]			
Surface Resistivity	1.E+01 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101283847	-	-
UL Recognized, 94HB Flame Class Rating	0.8	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°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) 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