LNP™ LUBRICOMP™ COMPOUND DL003E

DL-4030 EM

DESCRIPTION

LNP LUBRICOMP DL003E compound is based on Polycarbonate (PC) resin containing 15% PTFE. Added features of this grade include: Easy Molding, Wear Resistant.

GENERAL INFORMATION	
Features	Good Processability, Wear resistant
Fillers	Unreinforced, PTFE
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 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	45	MPa	ASTM D638
Tensile Stress, break	50	MPa	ASTM D638
Tensile Strain, yield	5.6	%	ASTM D638
Tensile Strain, break	25.5	%	ASTM D638
Tensile Modulus, 50 mm/min	2180	MPa	ASTM D638
Flexural Stress	82	MPa	ASTM D790
Flexural Modulus	2300	MPa	ASTM D790
Tensile Stress, yield	54	MPa	ISO 527
Tensile Stress, break	50	MPa	ISO 527
Tensile Strain, yield	5.5	%	ISO 527
Tensile Strain, break	9.6	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress	84	MPa	ISO 178
Flexural Modulus	2300	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	2136	J/m	ASTM D4812
Izod Impact, notched, 23°C	143	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	100	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A
THERMAL [1]			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	116	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.38E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.55E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	7.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	128	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.28	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs (2)	0.8 – 0.9	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.8 – 0.9	%	ASTM D955
Wear Factor Washer	60	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.18	-	ASTM D3702 Modified: Manual
Static COF	0.07	-	ASTM D3702 Modified: Manual
Density	1.29	g/cm³	ISO 1183
INJECTION MOLDING (3)			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 315	°C	
Front - Zone 3 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	305 – 315	°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) 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

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