LNP™ LUBRICOMP™ COMPOUND DL0029E

DL-4020 FR
REGION AMERICAS

DESCRIPTION

LNP LUBRICOMP DL0029E compound is based on Polycarbonate (PC) resin containing 10% PTFE. Added features of this grade include: Wear Resistant, Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, 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, yld, Type I, 5 mm/min	56	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	47	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	5.7	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	33	%	ASTM D638
Tensile Modulus, 5 mm/min	2240	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	86	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2330	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	2020	J/m	ASTM D4812
Izod Impact, notched, 23°C	119	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	46	J	ASTM D3763
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	141	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	130	°C	ASTM D648
CTE, -30°C to 30°C, flow	7.1E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	7.5E-05	1/°C	ASTM D696
PHYSICAL [1]			
Specific Gravity	1.31	-	ASTM D792
Density	1.31	g/cm³	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, (23°C/50% RH/24 hrs)	0.01	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.8 – 1	%	ASTM D955
Wear Factor Washer	55	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.2	-	ASTM D3702 Modified: Manual
Static COF	0.14	-	ASTM D3702 Modified: Manual
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