LNP™ STAT-KON™ COMPOUND DEL22P

DCL-4022 EP

DESCRIPTION

LNP STAT-KON DEL22P compound is based on Polycarbonate (PC) resin containing 10% carbon fiber, 10% PTFE. Added features of this grade include: Electrically Conductive. Exceptional Processing, Wear Resistant.

GENERAL INFORMATION	
Features	Electrically Conductive, High Flow, Wear resistant, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber, PTFE
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	100	MPa	ASTM D638
Tensile Strain, break	2	%	ASTM D638
Tensile Modulus, 50 mm/min	7900	MPa	ASTM D638
Flexural Stress	152	MPa	ASTM D790
Flexural Modulus	5690	MPa	ASTM D790
Tensile Stress, break	101	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	8170	MPa	ISO 527
IMPACT [1]			
Izod Impact, unnotched, 23°C	283	J/m	ASTM D4812
Izod Impact, notched, 23°C	74	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	13	J	ASTM D3763
Multiaxial Impact	102	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	134	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.4E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.6E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	1.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.6E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Af

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL [1]			
Density	1.3	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 0.75-2.3 mm [2]	0.1 – 0.3	%	SABIC method
Mold Shrinkage, flow [2]	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow, 0.75-2.3 mm [2]	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow [2]	0.4 – 0.6	%	SABIC method
Wear Factor Washer	15	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.55	-	ASTM D3702 Modified: Manual
Static COF	0.52	-	ASTM D3702 Modified: Manual
Density	1.3	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.18	%	ISO 62
ELECTRICAL [1]			
Volume Resistivity	1.E+02	Ω.cm	IEC 60093
Surface Resistivity, ROA	1.E+02 – 1.E+06	Ω	IEC 60093
INJECTION MOLDING [3]			
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) 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