LNP™ STAT-KON™ COMPOUND DD000P

D- EP

REGION ASIA

DESCRIPTION

LNP STAT-KON DD000P compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, Exceptional Processing.

GENERAL INFORMATION	
Features	Electrically Conductive, High Flow, No PFAS intentionally added
Fillers	Carbon Powder
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, yield	57	MPa	ASTM D638
Tensile Stress, break	49	MPa	ASTM D638
Tensile Strain, yield	4.8	%	ASTM D638
Tensile Strain, break	20.1	%	ASTM D638
Tensile Modulus, 50 mm/min	2750	MPa	ASTM D638
Flexural Modulus	2750	MPa	ASTM D790
Tensile Stress, yield	57	MPa	ISO 527
Tensile Stress, break	51	MPa	ISO 527
Tensile Strain, yield	4.8	%	ISO 527
Tensile Strain, break	9.9	%	ISO 527
Tensile Modulus, 1 mm/min	2800	MPa	ISO 527
Flexural Stress	78	MPa	ISO 178
Flexural Modulus	2400	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	2226	J/m	ASTM D4812
Izod Impact, notched, 23°C	234	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	40	J	ASTM D3763
Multiaxial Impact	40	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	205	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	135	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.66E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.48E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	6.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	126	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.23	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.7 – 0.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs (2)	0.74	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (2)	0.84	%	ISO 294
Density	1.23	g/cm³	ISO 1183
ELECTRICAL (1)			
Surface Resistivity (3)	1.E+03 – 1.E+09	Ω	ASTM D257
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) 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) Measurement meets requirements as specified in ASTM D4496.

(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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

DISCLAIMER