LNP™ STAT-KON™ COMPOUND DE003E

DC1003EM

DESCRIPTION

LNP STAT-KON DE003E compound is based on Polycarbonate (PC) resin containing 15% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Good Processability, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
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, 5 mm/min	134	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	12200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	184	MPa	ISO 178
Flexural Modulus, 2 mm/min	10800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	1.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.7E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage on Tensile Bar, flow [2]	0.1 – 0.2	%	SABIC method
Density	1.26	g/cm³	ISO 1183
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+02 – 1.E+04	Ω	ASTM D257
INJECTION MOLDING [4]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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.

DISCLAIMER