LNP™ STAT-KON™ COMPOUND MD000I

M1HI

DESCRIPTION

LNP STAT-KON MD000I compound is based on Polypropylene (PP) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, High Impact.

GENERAL INFORMATION	
Features	Electrically Conductive, Impact resistant, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polypropylene, Unspecified (PP, Unspecified)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20241028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	27	MPa	ISO 527
Tensile Stress, break, 5 mm/min	16	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.3	%	ISO 527
Tensile Strain, break, 5 mm/min	24	%	ISO 527
Flexural Stress, break, 2 mm/min	40	MPa	ISO 178
Flexural Modulus, 2 mm/min	1600	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	60	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	1.3E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.48E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	110	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	61	°C	ISO 75/Af
Relative Temp Index, Elec [2]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	65	°C	UL 746B
PHYSICAL [1]			
Density	1	g/cm³	ISO 1183
Melt Volume Rate, MVR at 230°C/10.0 kg	30	cm³/10 min	ISO 1133
Mold Shrinkage, flow, 24 hrs [3]	1.6 – 1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [3]	1.6 – 1.8	%	ISO 294

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL [1]			
Surface Resistivity [4]	1.E+02 – 1.E+04	Ω	ASTM D257
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101282741	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING [5]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
(3) 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.
(4) Measurement meets requirements as specified in ASTM D4496.
(5) 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