LNP™ STAT-KON™ COMPOUND ME006

MC-1006
REGION AMERICAS

DESCRIPTION

LNP STAT-KON ME006 compound is based on Polypropylene (PP) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
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 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	58	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	57	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	0.5	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	0.5	%	ASTM D638
Tensile Modulus, 50 mm/min	17340	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	78	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	12300	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	0.5	%	ISO 527
Tensile Strain, break, 5 mm/min	0.5	%	ISO 527
Tensile Modulus, 1 mm/min	13990	MPa	ISO 527
Flexural Stress	58	MPa	ISO 178
Flexural Modulus, 2 mm/min	12330	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	82	J/m	ASTM D4812
Izod Impact, notched, 23°C	41	J/m	ASTM D256
Multiaxial Impact	3	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	10	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	4	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	153	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	132	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.3E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	5.9E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	153	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.06	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.03	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.2 – 0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.7 – 0.9	%	ASTM D955
Density	1.06	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+01 – 1.E+03	Ω	ASTM D257
INJECTION MOLDING [4]			
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) 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