LNP™ STAT-KON™ COMPOUND FX98500C

PDX-F-98500

DESCRIPTION

LNP STAT-KON FX98500C compound is based on Polyethylene (PE) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polyethylene, Unspecified (PE, 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	23	MPa	ASTM D638
Tensile Stress, break	13	MPa	ASTM D638
Tensile Strain, yield	15.8	%	ASTM D638
Tensile Strain, break	43.2	%	ASTM D638
Tensile Modulus, 50 mm/min	1070	MPa	ASTM D638
Flexural Stress	26	MPa	ASTM D790
Flexural Modulus	870	MPa	ASTM D790
Tensile Stress, yield	23	MPa	ISO 527
Tensile Stress, break	14	MPa	ISO 527
Tensile Strain, yield	14	%	ISO 527
Tensile Strain, break	82.8	%	ISO 527
Tensile Modulus, 1 mm/min	870	MPa	ISO 527
Flexural Stress	27	MPa	ISO 178
Flexural Modulus	930	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	48	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	21	J	ASTM D3763
Multiaxial Impact	63	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	NB	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, 1.82 MPa, 3.2mm, unannealed	46	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	48	°C	ISO 75/Af
PHYSICAL [1]			
Density	0.976	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.02	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	2 – 4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	2 – 4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	2 – 4	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	2 – 4	%	ISO 294
Density	0.97	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62
ELECTRICAL [1]			
Volume Resistivity [3]	1.E+02 – 1.E+05	Ω.cm	ASTM D257
Surface Resistivity [3]	1.E+02 – 1.E+05	Ω	ASTM D257
INJECTION MOLDING [4]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	40 – 55	°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