LNP™ STAT-KON™ COMPOUND FX09905

FX09905

DESCRIPTION

LNP STAT-KON FX09905 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 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	29	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	20	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	9.6	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	24.2	%	ASTM D638
Tensile Modulus, 50 mm/min	1694	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	1400	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	27	MPa	ISO 527
Tensile Stress, break, 5 mm/min	23	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	8.7	%	ISO 527
Tensile Strain, break, 5 mm/min	17.8	%	ISO 527
Tensile Modulus, 1 mm/min	1449	MPa	ISO 527
Flexural Stress	31	MPa	ISO 178
Flexural Modulus, 2 mm/min	1445	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	85	J/m	ASTM D256
Multiaxial Impact	14.9	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	5.7	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	106	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4.8	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	98	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	58	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	1.2E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	1.3E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	84	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	54	°C	ISO 75/Af
PHYSICAL (1)			
Specific Gravity	1.02	-	ASTM D792
Density	1.02	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	.0079	%	ASTM D570
Moisture Absorption (23°C / 50% RH)	0.022	%	ISO 62
ELECTRICAL (1)			
Surface Resistivity (2)	2 – 5	Ω	ASTM D257
INJECTION MOLDING (3)			
Drying Temperature	82	°C	
Drying Time	4	Hrs	
Melt Temperature	232	°C	
Front - Zone 3 Temperature	221 – 232	°C	
Middle - Zone 2 Temperature	210 – 221	°C	
Rear - Zone 1 Temperature	193 – 204	°C	
Mold Temperature	37 – 54	°C	
Back Pressure	0.17 – 0.34	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) Measurement meets requirements as specified in ASTM D4496.

(3) 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