LNP™ THERMOCOMP™ COMPOUND EX11414

EX11414

DESCRIPTION

LNP THERMOCOMP EX11414 compound is based on Polyetherimide (PEI) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive, FAR25.853 Compliant.

GENERAL INFORMATION	
Features	Flame Retardant, Electrically Conductive, Carbon fiber filled, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood, Aerospace
Building and Construction	Building Component
Consumer	Sport/Leisure
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	230	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D638
Tensile Modulus, 5 mm/min	17380	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	308	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	14600	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	598	J/m	ASTM D4812
Izod Impact, notched, 23°C	78	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	213	°C	ASTM D648
PHYSICAL [1]			
Specific Gravity	1.33	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.23	%	ASTM D570
Poisson's Ratio	0.44	-	ASTM E132
ELECTRICAL [1]			
Surface Resistivity	1.E+04 – 1.E+05	Ω	ASTM D257
INJECTION MOLDING [2]			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 400	°C	
Rear - Zone 1 Temperature	360 – 380	°C	
Middle - Zone 2 Temperature	370 – 390	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Nozzle Temperature	390 – 400	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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) 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