LNP™ STAT-KON™ Compound DEF13

DCF-1004

DESCRIPTION

LNP STAT-KON DEF13 compound is based on Polycarbonate (PC) resin containing 5% glass fiber and 15% 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, Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20260904

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Flexural Strength, 2 mm/min	211	MPa	ISO 178
Flexural Modulus, 2 mm/min	18500	MPa	ISO 178
Tensile Stress, yield, 5 mm/min	44	MPa	ISO 527
Tensile Stress, break, 5 mm/min	12	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	12410	MPa	ISO 527
Tensile Stress, break	118	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	61	MPa	ASTM D638
Tensile Strain, break	4	%	ASTM D638
Tensile Modulus, 50 mm/min	17870	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	159	MPa	ASTM D790
Flexural Modulus	9440	MPa	ASTM D790
IMPACT [1]			
Izod impact, notched			
80*10*4 +23°C	13	kJ/m²	ISO 180/1A
23°C	101	J/m	ASTM D256
Izod Impact, Unnotched			
23°C, 6.4mm	513	J/m	ASTM D4812
THERMAL [1]			
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	148	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	144	°C	ISO 75/Ae
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D648

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	144	°C	ASTM D648
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
PHYSICAL [1]			
Density	1.29	g/cm³	ISO 1183
Specific Gravity	1.29	-	ASTM D792
Density	1.29	g/cm³	ASTM D792
Water Absorption, (23°C/24hrs)	0.07	%	ASTM D570
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+02 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E121562-101283876	-	-
UL Recognized, 94V-0 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Maximum Moisture Content	0.02	%	
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) 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.

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