LNP™ STAT-KON™ COMPOUND DE003EIR

DC-1003 EM MR

DESCRIPTION

LNP STAT-KON DE003EIR compound is based on Polycarbonate (PC) resin containing 15% carbon fiber. Added features of this grade include Easy Molding, Mold Release, Electrically Conductive and Impact Modified.

GENERAL INFORMATION	
Features	Electrically Conductive, Good Processability, Enhanced mold release, Carbon fiber filled, High stiffness/Strength, Impact resistant, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20250606

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	156	MPa	ASTM D638
Tensile Strain, break	3.1	%	ASTM D638
Tensile Modulus, 5 mm/min	11900	MPa	ASTM D638
Flexural Stress	229	MPa	ASTM D790
Flexural Modulus	9700	MPa	ASTM D790
Tensile Stress, break	158	MPa	ISO 527
Tensile Strain, break	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	12200	MPa	ISO 527
Flexural Stress	221	MPa	ISO 178
Flexural Modulus	9700	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	725	J/m	ASTM D4812
Izod Impact, notched, 23°C	116	J/m	ASTM D256
Multiaxial Impact	8	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	134	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Af
Vicat Softening Temp, Rate B/120	142	°C	ISO 306
Vicat Softening Temp, Rate B/50	142	°C	ISO 306
PHYSICAL (1)			
Mold Shrinkage, flow	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow	0.3 – 0.4	%	SABIC method
Moisture Absorption, (23°C/50% RH/24hrs)	0.05 – 0.1	%	ISO 62-4
Water Absorption, (23°C/saturated)	0.2 – 0.3	%	ISO 62-1
Density	1.25	g/cm³	ISO 1183
ELECTRICAL (1)			
Surface Resistivity (2)	1.E+01 – 1.E+05	Ω	ASTM D257
FLAME CHARACTERISTICS (3)			
UL Yellow Card Link	E45329-104688846	-	-
UL Recognized, 94V-1 Flame Class Rating	3	mm	UL 94
UL Recognized, 94HB Flame Class Rating 2nd value	0.8	mm	UL 94
INJECTION MOLDING (4)			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
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	
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) Measurement meets requirements as specified in ASTM D4496.

(3) 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.

(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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