LNP™ STAT-KON™ COMPOUND JK800

DESCRIPTION

LNP™ STAT-KON™ JK800 compound is a 8% carbon fiber reinforced PC+ABS, electrostatic dissipative ECO conforming FR. Good hydrolytic stability.

TYPICAL PROPERTY VALUES

Revision 20200110

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	96	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	96	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	7580	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	144	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6200	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	95	MPa	ISO 527
Tensile Stress, break, 5 mm/min	95	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.9	%	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	7500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	145	MPa	ISO 178
Flexural Stress, break, 2 mm/min	145	MPa	ISO 178
Flexural Modulus, 2 mm/min	6380	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	347	J/m	ASTM D 4812
Izod Impact, notched, 23°C	37	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	82	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	111	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	94	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.48E-05	1/°C	ASTM E 831
CTE, 23°C to 80°C, flow	2.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	7.4E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	101	°C	ISO 306
Relative Temp Index, Elec (1)	60	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	60	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	60	°C	UL 746B
PHYSICAL			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	1.25	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.1 – 0.2	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.2 – 0.4	%	SABIC method
Melt Flow Rate, 260°C/2.16 kgf	17	g/10 min	ASTM D 1238
ELECTRICAL			
Volume Resistivity	1.E+03	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+06	Ohm	ASTM D 257
Static Decay, 5000V to <50V	0.01	< seconds	FTMS101B
Hot-Wire Ignition (HWI), PLC 0	≥1	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥1	mm	UL 746A
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-221061	-	-
UL Yellow Card Link 2	E207780-101632098	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1	mm	UL 94
UL Recognized, 94-5VB Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 1.5 mm	800	°C	IEC 60695-2-13
Glow Wire Flammability Index, 1.5 mm	960	°C	IEC 60695-2-12
INJECTION MOLDING			
Drying Temperature	75 – 80	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	230 – 275	°C	
Nozzle Temperature	230 – 275	°C	
Front - Zone 3 Temperature	225 – 275	°C	
Middle - Zone 2 Temperature	215 – 260	°C	
Rear - Zone 1 Temperature	210 – 255	°C	
Mold Temperature	50 – 70	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038 – 0.076	mm	

(1) 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.

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