SABIC Innovative Plastics™

LNP* Stat-kon* Compound Cycoloy_JK800 Americas: COMMERCIAL

LNP* Stat-kon* Cycoloy_JK800 compound is an 8% carbon fiber reinforcedPC+ABS, electrostatic dissipative ECO conforming FR. Good hydrolytic stability.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
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	Value	Unit	Standard
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	Value	Unit	Standard
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	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL	Value	Unit	Standard
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	Value	Unit	Standard
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
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-0 Flame Class Rating (3)	0.99	mm	UL 94
UL Recognized, 94-5VB Rating (3)	1.49	mm	UL 94

Source GMD, last updated:10/29/2002

Processing

Parameter Injection Molding	Value	Unit
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

Source GMD, last updated:10/29/2002

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.

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