

LNP* Stat-kon* Compound DX07323

Americas: COMMERCIAL

Also known as: low-temperature high impact material
Product Reorder Name: DX07323

LNP* STAT-KON* DX07323 is a compound based on polycarbonate resin containing conductive fillers. Added features of this compound includes: ESD safe and excellent low-temperature impact performance, intended for compliance to ATEX.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yield	45	MPa	ASTM D 638
Tensile Stress, break	55	MPa	ASTM D 638
Tensile Strain, yield	5	%	ASTM D 638
Tensile Strain, break	9	%	ASTM D 638
Tensile Modulus, 5 mm/min	2400	MPa	ASTM D 638
Flexural Stress	84	MPa	ASTM D 790
Flexural Modulus	2200	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	44	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 5 mm/min	9	%	ISO 527
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Flexural Stress, break, 2 mm/min	88	MPa	ISO 178
Flexural Modulus, 2 mm/min	2400	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1600	J/m	ASTM D 4812
Izod Impact, unnotched, -40°C	1500	J/m	ASTM D 4812
Izod Impact, notched, 23°C	180	J/m	ASTM D 256
Izod Impact, notched, -40°C	100	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	130	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -40°C	100	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	10	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	124	°C	ISO 75/Af
PHYSICAL			
Density	1.26	g/cm ³	ASTM D 792
Mold Shrinkage, flow	0.5	%	SABIC Method
Mold Shrinkage, xflow	0.5	%	SABIC Method
Mold Shrinkage, flow, 24 hrs	0.4 - 0.7	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4 - 0.7	%	ASTM D 955

Melt Flow Rate, 300°C/10 kg	55	g/10 min	ASTM D 1238
Density	1.26	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 300°C/10.0 kg	50	cm ³ /10 min	ISO 1133
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	1.E+06 - 1.E+10	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+06 - 1.E+10	Ohm	ASTM D 257
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-1 Flame Class Rating (3)	2.5	mm	UL 94

Source GMD, last updated:04/07/2008

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	290 - 305	°C
Front - Zone 3 Temperature	290 - 300	°C
Middle - Zone 2 Temperature	290 - 300	°C
Rear - Zone 1 Temperature	280 - 295	°C
Mold Temperature	95 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:04/07/2008

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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