LNP™ STAT-KON™ COMPOUND DX02437

DESCRIPTION

LNP STAT-KON DX02437 compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, Impact Modified.

GENERAL INFORMATION	
Features	Electrically Conductive, Impact resistant, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding, Extrusion

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20241025

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	58	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	47	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	19.3	%	ASTM D638
Tensile Modulus, 5 mm/min	2560	MPa	ASTM D638
Tensile Stress, yield, 5 mm/min	58	MPa	ISO 527
Tensile Stress, break, 5 mm/min	47	MPa	ISO 527
Tensile Strain, break, 5 mm/min	16.5	%	ISO 527
Tensile Modulus, 1 mm/min	2550	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	92	MPa	ISO 178
Flexural Stress, break, 2 mm/min	90	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7.8	%	ISO 178
Flexural Modulus, 2 mm/min	2550	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	2140	J/m	ASTM D4812
Izod Impact, notched, 23°C	359	J/m	ASTM D256
Izod Impact, notched, 0°C	294	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	27	J	ASTM D3763
Multiaxial Impact	63	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	39	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	130	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	24	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	20	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	26	kJ/m²	ISO 179/1eA

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	95	kJ/m²	ISO 179/1eU
THERMAL [1]			
Vicat Softening Temp, Rate A/50	144	°C	ASTM D1525
HDT, 1.82 MPa, 3.2 mm	111	°C	ASTM D648
Vicat Softening Temp, Rate A/50	144	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	126	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.236	g/cm³	ASTM D792
Mold Shrinkage, flow, 1.5-3.2 mm [2]	0.64	%	SABIC method
Mold Shrinkage, xflow, 1.5-3.2 mm [2]	0.68	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	16	cm³/10 min	ISO 1133
ELECTRICAL [1]			
Volume Resistivity [3]	1.41E+07	Ω.cm	ASTM D257
Surface Resistivity [3]	4.8E+07	Ω	ASTM D257
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	
FILM EXTRUSION [1]			
Drying Time	4	Hrs	
Drying Temperature	120 – 120	°C	
Barrell Temperature - Rear	250 – 280	°C	
Barrell Temperature - Middle	260 – 300	°C	
Barrell Temperature - Front	260 – 300	°C	
Roll Temperature	80 – 100	°C	

(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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(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.

DISCLAIMER