LNP™ STAT-KON™ COMPOUND DEP32

DCL-4532
REGION AMERICAS

DESCRIPTION

LNP STAT-KON DEP32 compound is based on Polycarbonate (PC) resin containing 10% carbon fiber, 15% PTFE/silicone. Added features of this grade include: Electrically Conductive, Wear Resistant.

GENERAL INFORMATION	
Features	Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber, PTFE/Silicone
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20240425

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	108	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D638
Tensile Modulus, 5 mm/min	7790	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	166	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	163	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	6970	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	108	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	7800	MPa	ISO 527
Flexural Stress	161	MPa	ISO 178
Flexural Modulus, 2 mm/min	6950	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	468	J/m	ASTM D4812
Izod Impact, notched, 23°C	114	J/m	ASTM D256
Multiaxial Impact	7	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	24	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	148	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	145	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	1.7E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	6.E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	145	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
PHYSICAL (1)			
Specific Gravity	1.28	-	ASTM D792
Density	1.28	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.12	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	0.2 – 0.4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.3 – 0.5	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.18	%	ISO 62
ELECTRICAL (1)			
Surface Resistivity (3)	1.E+02	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	

(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