LNP™ STAT-KON™ COMPOUND DEL36P

DCL-4036 EP

DESCRIPTION

LNP STAT-KON DEL36P compound is based on Polycarbonate (PC) resin containing 30% carbon fiber, 15% PTFE. Added features of this grade include: Internally Lubricated, Exceptional Processing, Electrically Conductive, Wear Resistant.

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

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	148	MPa	ISO 527
Tensile Stress, break, 5 mm/min	148	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.3	%	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	22100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	179	MPa	ISO 178
Flexural Stress, break, 2 mm/min	177	MPa	ISO 178
Flexural Strain, break, 2 mm/min	1.5	%	ISO 178
Flexural Modulus, 2 mm/min	15400	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	2.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	130	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage, flow [2]	0.1 – 0.3	%	SABIC method
Wear Factor Washer	9	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.55	-	ASTM D3702 Modified: Instr.
Static COF	0.66	-	ASTM D3702 Modified: Instr.

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.42	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.1	%	ISO 62-1
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+02 – 1.E+04	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