LNP™ STAT-KON™ COMPOUND OE004A

OC-1004

DESCRIPTION

LNP STAT-KON OE004A compound is based on Polyphenylene Sulfide (PPS) branched resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION

Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyphenylene Sulfide, Branched (PPS, Branched)
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	185	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	21630	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	242	MPa	ISO 178
Flexural Modulus, 2 mm/min	15700	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	1.1E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	277	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	256	°C	ISO 75/Af
Relative Temp Index, Elec [2]	130	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	130	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	130	°C	UL 746B
PHYSICAL [1]			
Mold Shrinkage, flow [3]	0.1 – 0.3	%	SABIC method
Density	1.41	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.04	%	ISO 62-1
ELECTRICAL [1]			
Surface Resistivity [4]	1.E+01 – 1.E+04	Ω	ASTM D257

CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101343836	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING [5]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Melt Temperature	315 – 320	°C	
Front - Zone 3 Temperature	330 – 345	°C	
Middle - Zone 2 Temperature	320 – 330	°C	
Rear - Zone 1 Temperature	305 – 315	°C	
Mold Temperature	140 – 165	°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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

(4) Measurement meets requirements as specified in ASTM D4496.

(5) 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

CHEMISTRY THAT MATTERS™