LNP™ STAT-KON™ COMPOUND OEP32

OCL-4532 LEX
REGION AMERICAS

DESCRIPTION

LNP STAT-KON OEP32 compound is based on Polyphenylene Sulfide (PPS) linear 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	Polyphenylene Sulfide, Linear (PPS, Linear)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20241028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	127	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.4	%	ASTM D638
Tensile Modulus, 5 mm/min	11220	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	168	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	9720	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	125	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	11240	MPa	ISO 527
Flexural Stress	172	MPa	ISO 178
Flexural Modulus, 2 mm/min	9740	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	428	J/m	ASTM D4812
Izod Impact, notched, 23°C	37	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	8	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	23	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL [1]			
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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL [1]			
Density	1.41	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [3]	0.5 – 0.7	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [3]	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [3]	0.5 – 0.7	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [3]	0.6 – 0.8	%	ISO 294
Wear Factor Washer	39	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.32	-	ASTM D3702 Modified: Manual
Static COF	0.33	-	ASTM D3702 Modified: Manual
Density	1.41	g/cm³	ISO 1183
ELECTRICAL [1]			
Surface Resistivity [4]	1.E+02 – 1.E+04	Ω	ASTM D257
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E121562-101283798	-	-
UL Recognized, 94V-0 Flame Class Rating	1	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