

LNPTM STAT-KONTM COMPOUND OE004AE

OC-1004 EM

DESCRIPTION

LNP STAT-KON OE004AE compound is based on Polyphenylene Sulfide (PPS) branched resin containing 20% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Good Processability, Carbon fiber filled, High stiffness/Strength
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 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	163	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	163	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	0.8	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	0.8	%	ASTM D638
Tensile Modulus, 50 mm/min	27160	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	215	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	15710	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	146	MPa	ISO 527
Tensile Stress, break, 5 mm/min	146	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	0.8	%	ISO 527
Tensile Strain, break, 5 mm/min	0.8	%	ISO 527
Tensile Modulus, 1 mm/min	19120	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	208	MPa	ISO 178
Flexural Modulus, 2 mm/min	16050	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	254	J/m	ASTM D4812
Izod Impact, notched, 23°C	47	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	279	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	263	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	262	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.42	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.5 – 0.7	%	ASTM D955
Density	1.42	g/cm ³	ISO 1183
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+02 – 1.E+06	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
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) 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.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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