

LNPT[™] STAT-KON[™] COMPOUND KEL22A

DESCRIPTION

LNP STAT-KON KEL22A compound is based on Acetal Homopolymer (POM) resin containing 10% carbon fiber, 10% PTFE. Added features of this grade include: Electrically Conductive, Internally Lubricated, Wear Resistant.

GENERAL INFORMATION

Features	Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber, PTFE
Polymer Types	Acetal (POM) Homopolymer
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components
Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1	%	ISO 527
Tensile Modulus, 1 mm/min	8400	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	89	MPa	ISO 178
Flexural Stress, break, 2 mm/min	82	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7.9	%	ISO 178
Flexural Modulus, 2 mm/min	6100	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	2.E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.19E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Mold Shrinkage, flow ⁽²⁾	0.33	%	SABIC method
Density	1.48	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	0.5	%	ISO 62-1
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+02 – 1.E+03	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	

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CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°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.

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