

LNPTM STAT-KONTM COMPOUND RE0069S

RC-1006 FR HS
REGION AMERICAS

DESCRIPTION

LNP STAT-KON RE0069S compound is based on Nylon 6/6 resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive, Flame Retardant, Heat Stabilized.

GENERAL INFORMATION	
Features	Flame Retardant, Electrically Conductive, Heat Stabilized, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyamide 66 (Nylon 66)
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, 50 mm/min	199	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	199	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	1.6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	1.6	%	ASTM D638
Tensile Modulus, 50 mm/min	26960	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	269	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	269	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	18590	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	207	MPa	ISO 527
Tensile Stress, break, 5 mm/min	207	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.4	%	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	24950	MPa	ISO 527
Flexural Stress	324	MPa	ISO 178
Flexural Modulus, 2 mm/min	19560	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1018	J/m	ASTM D4812
Izod Impact, notched, 23°C	78	J/m	ASTM D256
Multiaxial Impact	2	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	8	J	ASTM D3763

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	255	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	242	°C	ASTM D648
CTE, -30°C to 30°C, flow	8.E-06	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	8.E-06	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	255	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	242	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.49	-	ASTM D792
Density	1.5	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.4	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.7 – 0.9	%	ASTM D955
Density	1.49	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.56	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+01 – 1.E+04	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 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.

MORE INFORMATION

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

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