LNP™ STAT-KON™ COMPOUND EX11402R

DESCRIPTION

LNP STAT-KON EX11402R compound is based on Polyetherimide (PEI) resin containing proprietary fillers. Added features of this grade include: Electrically Conductive, Radar Absorbing.

GENERAL INFORMATION	
Features	Electrically Conductive, Radar Absorption, High temperature resistance, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20240715

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	74	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.3	%	ASTM D638
Tensile Modulus, 5 mm/min	3840	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	132	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4000	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	85	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	3730	MPa	ISO 527
Flexural Strength, 2 mm/min	159	MPa	ISO 178
Flexural Modulus, 2 mm/min	3680	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	346	J/m	ASTM D4812
Izod Impact, notched, 23°C	16	J/m	ASTM D256
Multiaxial Impact	1	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	3	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	205	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	201	°C	ASTM D648
CTE, -30°C to 30°C, flow	4.4E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	4.5E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	192	°C	ISO 75/Af
PHYSICAL (1)			
Specific Gravity	1.3	-	ASTM D792
Density	1.29	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.35	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	0.3 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	0.5 – 0.7	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62
ELECTRICAL (1)			
Surface Resistivity (3)	1.E+02 – 1.E+05	Ω	ASTM D257
INJECTION MOLDING (4)			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	.02	%	
Melt Temperature	360 – 400	°C	
Rear - Zone 1 Temperature	360 – 380	°C	
Middle - Zone 2 Temperature	370 – 390	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Nozzle Temperature	390 – 400	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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

DISCLAIMER