

LNPTM STAT-KONTM COMPOUND ZE002

ZC-1002

DESCRIPTION

LNP STAT-KON ZE002 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 10% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

MECHANICAL ⁽¹⁾ Tensile Stress, break, 5 mm/min104MPaISO 527Tensile Strain, break, 5 mm/min1.6%ISO 527Flexural Modulus, 2 mm/min115MPaISO 178Flexural Modulus, 2 mm/min5500MPaISO 178Impact, 101So 178ImpactImpactIzod Impact, outched 80°10°4 +23°C5Kl/m²ISO 180/1UIzod Impact, notched 80°10°4 +23°C5Kl/m²ISO 180/1APersicaL ⁽¹⁾ So 180/14 +23°C5Kl/m²ISO 180/1APersicaL ⁽¹⁾ 1.11g/cm³ISO 180/1AELECTRICAL ⁽¹⁾ SABIC methodPersity1.11g/cm³ISO 1183ELECTRICAL ⁽¹⁾ INIECTION MOLDING ⁽⁴⁾ 120°C.Pring Temperature300 - 305°C.Image Temperature300 - 300°C.Image Temperature290 - 300°C.Image Temperature80 - 110°C.Image Temperature80 - 110°C.Image Temperature80 - 110°C.Image Temperature0.2 - 0.3MPa.	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Strain, break, 5 mm/min1.6%ISO 527Flexural Modulus, 2 mm/min115MPaISO 178Flexural Modulus, 2 mm/min5500MPaISO 178Iterati Modulus, 2 mm/min5500MPaISO 178Iterati Modulus, 2 mm/min5500MPaISO 180/10Iterati Modulus, 2 mm/min15Kl/m²ISO 180/10Iterati Modulus, 2 mm/min15Kl/m²ISO 180/10IterationKl/m²ISO 180/10ISO 180/10Iteration2-0.4%SABIC methodPersister1.11g/cm³ISO 183Iteration1.20%SABIC methodDensity1.21g/cm³ISO 183Iteration1.20%SABIC methodIteration1.20%SABIC methodPrivice Resistivity ⁽³⁾ 1.2401.240%Iteration1.20%SABIC methodIteration1.20%%SABIC methodIteration1.20%%SABIC methodIteration1.20%%SABIC methodIteration3.003.00%%SABIC methodIteration3.003.00%%SABIC methodIteration3.003.00%%%Iteration3.00%%%%Iteration3.00%%%Iteration3.00%%%Iteration3.00% <th< td=""><td>MECHANICAL⁽¹⁾</td><td></td><td></td><td></td></th<>	MECHANICAL ⁽¹⁾			
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IMPACT ⁽¹⁾ ISO 180/10*4 +23°C ISO 180/10 Izod Impact, unotched 80*10*4 +23°C 5 kJ/m² ISO 180/14 PHYSICAL ⁽¹⁾ ISO 180/14 ISO 180/14 PHYSICAL ⁽¹⁾ Mold Shrinkage on Tensile Bar, flow ⁽²⁾ 0.2 – 0.4 % SABIC method Density 1.11 g/cm³ ISO 183/1 ELECTRICAL ⁽¹⁾ J.E+02 – 1.E+04 Ω ASTM D257 INJECTION MOLDING ⁽⁴⁾ 120 °C SC Drying Temperature 300 – 305 °C SC Middle - Zone 3 Temperature 300 – 310 °C SC Middle - Zone 1 Temperature 290 – 300 °C SC Middle - Zone 1 Temperature 80 – 110 °C SC	Flexural Stress, break, 2 mm/min	115	MPa	ISO 178
Izod Impact, unnotched 80*10*4 +23°C 15 k/m² ISO 180/1U Izod Impact, notched 80*10*4 +23°C 5 k/m² ISO 180/1A PHYSICAL ⁽¹⁾ Mold Shrinkage on Tensile Bar, flow ⁽²⁾ 0.2 - 0.4 % SABIC method Density 1.11 g/cm³ ISO 1183 ELECTRICAL ⁽¹⁾ J . . Surface Resistivity ⁽³⁾ 1.E+02 - 1.E+04 Ω ASTM D257 INIECTION MOLDING ⁽⁴⁾ Drying Temperature 120 °C . . Melt Temperature 300 - 305 °C . . Finet - Zone 3 Temperature 300 - 310 °C . . Middle - Zone 2 Temperature 290 - 300 °C . . . Middle - Zone 1 Temperature 80 - 110 °C 	Flexural Modulus, 2 mm/min	5500	MPa	ISO 178
Izod Impact, notched 80*10*4 +23°C 5 kl /m² ISO 180/1A PHYSICAL ⁽¹⁾	IMPACT ⁽¹⁾			
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ELECTRICAL ⁽¹⁾ ΩASTM D257Surface Resistivity ⁽³⁾ 1.E+02 – 1.E+04ΩASTM D257INJECTION MOLDING ⁽⁴⁾ Drying Temperature120°C-Drying Time4Hrs-Melt Temperature300 – 305°C-Front - Zone 3 Temperature290 – 300°C-Middle - Zone 2 Temperature290 – 300°C-Mold Temperature80 – 110°C-Mold Temperature80 – 110°C-	Mold Shrinkage on Tensile Bar, flow ⁽²⁾	0.2 – 0.4	%	SABIC method
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INJECTION MOLDING ⁽⁴⁾ Drying Temperature120°CDrying Time4HrsMelt Temperature300 - 305°CFront - Zone 3 Temperature300 - 310°CMiddle - Zone 2 Temperature290 - 300°CRear - Zone 1 Temperature275 - 290°CMold Temperature80 - 110°C	ELECTRICAL ⁽¹⁾			
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Front - Zone 3 Temperature 300 - 310 °C Middle - Zone 2 Temperature 290 - 300 °C Rear - Zone 1 Temperature 275 - 290 °C Mold Temperature 80 - 110 °C	Drying Time	4	Hrs	
Middle - Zone 2 Temperature 290 – 300 °C Rear - Zone 1 Temperature 275 – 290 °C Mold Temperature 80 – 110 °C	Melt Temperature	300 – 305	°C	
Rear - Zone 1 Temperature 275 – 290 °C Mold Temperature 80 – 110 °C	Front - Zone 3 Temperature	300 – 310	°C	
Mold Temperature 80 – 110 °C	Middle - Zone 2 Temperature	290 – 300	°C	
	Rear - Zone 1 Temperature	275 – 290	°C	
Back Pressure 0.2 – 0.3 MPa	Mold Temperature	80 – 110	°C	
	Back Pressure	0.2 – 0.3	MPa	
Screw Speed 30 – 60 rpm	Screw Speed	30 – 60	rpm	

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CHEMISTRY THAT MATTERS



- (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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