

LNPTM STAT-KONTM COMPOUND DD000P

D- EP REGION ASIA

DESCRIPTION

LNP STAT-KON DD000P compound is based on Polycarbonate (PC) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive, Exceptional Processing.

GENERAL INFORMATION	
Features	Electrically Conductive, High Flow, No PFAS intentionally added
Fillers	Carbon Powder
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, yield	57	MPa	ASTM D638
Tensile Stress, break	49	MPa	ASTM D638
Tensile Strain, yield	4.8	%	ASTM D638
Tensile Strain, break	20.1	%	ASTM D638
Tensile Modulus, 50 mm/min	2750	MPa	ASTM D638
Flexural Modulus	2750	MPa	ASTM D790
Tensile Stress, yield	57	MPa	ISO 527
Tensile Stress, break	51	MPa	ISO 527
Tensile Strain, yield	4.8	%	ISO 527
Tensile Strain, break	9.9	%	ISO 527
Tensile Modulus, 1 mm/min	2800	MPa	ISO 527
Flexural Stress	78	MPa	ISO 178
Flexural Modulus	2400	MPa	ISO 178
IMPACT (1)			
Izod Impact, unnotched, 23°C	2226	J/m	ASTM D4812
Izod Impact, notched, 23°C	234	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	40	J	ASTM D3763
Multiaxial Impact	40	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	205	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL (1)			



PROFERTIES TYPICAL VALUES UNITS TEST METHODS HDT, 0.45 MPa, 3.2 mm, unannealed 135 "C ASTM D648 HDT, 1.82 MPa, 3.2 mm, unannealed 125 "C ASTM D648 CTE, 40°C to 40°C, flow 6.666-05 1,"C ASTM E831 CTE, 40°C to 40°C, flow 6.660-05 1,"C ASTM E831 CTE, 40°C to 40°C, flow 6.640-05 1,"C ASTM E831 CTE, 40°C to 40°C, flow 6.640-05 1,"C S0 13359-2 CTE, 40°C to 40°C, flow 6.640-05 1,"C S0 75/M HDTJB, 0.45 MPa flatw 80°10°4 sp=64mm 125 "C 150 75/M HDTJB, 0.45 MPa flatw 80°10°4 sp=64mm 126 3 Jcm STM D792 Mold Smirk Palex 80°10°4 sp=64mm 128 3 Jcm MSTM D792 PWYSICAL (") 1.23 3 Jcm MSTM D792 Mold Smirk 1, 20 Mpa flatw 80°10°4 sp=64mm 0.1 3 MSTM D792 Mold Shrinkage, flow, 24 hrs ⁽⁰⁾ 0.6 -0.8 3 MSTM D792 Mold Shrinkage, flow, 24 hrs ⁽⁰⁾ 0.7 -0.9 3 MSTM D955 Mold Shrinkag				
HDT. 1.82 MPa, 3.2mm, unannealed 25 CC ASTM D648 CTE. 40°C to 40°C, flow 6.666.05 1,°C ASTM E831 CTE. 40°C to 40°C, flow 6.486.05 1,°C ASTM E831 CTE, 40°C to 40°C, flow 6.486.05 1,°C S0 11359.2 CTE, 40°C to 40°C, flow 6.460.03 1,°C S0 1359.2 HDT (H, 1.8 MPa Flatw 80°10°4 sp=64mm 135 C 50 75/μ HDT (H, 1.8 MPa Flatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Brosslot V V S0 75/μ Workstra Blatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Brosslot V V S0 75/μ Workstra Blatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Workstra Blatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Workstra Blatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Workstra Blatw 80°10°4 sp=64mm 123 S0 75/μ S0 75/μ Workstra Blatw 80°10°4 sp=64mm 20 75/μ S0 75/μ S0 75/μ S0 75/μ	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, 40°C to 40°C, flow 6.6E-05 1,°C ASTM E831 CTE, 40°C to 40°C, flow 6.48-05 1,°C ASTM E831 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 11359-2 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 11359-2 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 1359-2 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 1359-2 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 1359-2 CTE, 40°C to 40°C, flow 6.6E-05 1,°C ISD 1359-2 DED JB, 10, 45 Mp 3 Flat was 010°4 spe 64mm 135 C ISD 75, JB BDTJ/BI, 12, 45 Mp 3 Flat was 10°1 a specifically and 10°1 a specifically and 10°2 a specifically	HDT, 0.45 MPa, 3.2 mm, unannealed	135	°C	ASTM D648
CTE, 40°C to 40°C, xflow 6.8805 1°C ASTM E831 CTE, 40°C to 40°C, flow 6.6805 1°C IS 011359-2 CTE, 40°C to 40°C, xflow 6.4805 1°C IS 011359-2 HDT/BI, 0.45 MPa Flatw 80°10°4 sp=64mm 135 °C ISO 75/BI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 126 °C ISO 75/AI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 126 °C ISO 75/AI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 135 °C ISO 75/AI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 135 °C ISO 75/AI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 136 °C ISO 75/AI HDT/AI, 1.8 MPa Flatw 80°10°4 sp=64mm 126 SC 75/AI SC 75/AI BUSTAIN STAND	HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D648
CF, 40°C to 40°C, flow 66605 1,°C 80133992 CTE, 40°C to 40°C, xflow 64605 1,°C 80135992 HDTJBI, 0.45 MPA Flatw 80°10°4 sp=64mm 135 °C 80.75 fbt HDTJAI, 1.8 MPA Flatw 80°10°4 sp=64mm 126 °C 80.75 fbt HHYSCAL ¹¹ ************************************	CTE, -40°C to 40°C, flow	6.66E-05	1/°C	ASTM E831
CFE, 40°C to 40°C, xflow6.46051°CISO 1359-2HDT/Bf, 0.45 MPa Flatw 80°10°4 sp=64mm135°C150 75 /BFDF/Af, 1.8 MPa Flatw 80°10°4 sp=64mm126°C150 75 /BPHYSICAL***Density2.39/cm³ASTM D792Molsty Absorbion (23°C/50% RH/24 hrs)1.23.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 0.6-0.83.63.7Mold Shrinkage, filow, 24 hrs ⁽²⁾ 0.7-0.93.63.7Mold Shrinkage, filow, 24 hrs ⁽²⁾ 0.843.0150 294Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.33.6150 294Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.83.62.9Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.83.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.83.63.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.83.63.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 2.83.63.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 3.63.63.63.6Mold Shrinkage, filow, 24 hrs ⁽²⁾ 3.63.63.63.63.6Mold Shrinkage, filow, 24 hrs ⁽²	CTE, -40°C to 40°C, xflow	6.48E-05	1/°C	ASTM E831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 135 °C 150 75 /Bf HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 126 °C 150 75 /Af PHYSICAL** Desity 1.23 2.9 (m²) ASTM D792 Molsture Absorption (23°C/50% RH/24 hrs) 1.6 8 ASTM D570 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.6−0.8 \$ ASTM D550 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 7-0.9 \$ ASTM D55 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 2.4 2.9 150 294 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 2.8 2.9 150 294 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 2.8 2.9 150 294 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 2.8 2.9 150 294 Possible 2.8 2.9 150 294 150 294 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 2.8 2.9 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294 150 294	CTE, -40°C to 40°C, flow	6.6E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80°10'4 sp=64mm 26 © C 5075/AI PHYSICAL. (1) Density 1.23 g/cm² ASTM D952 Molds Spriton, (23°C/50% RH/24 hrs) 0.6 – 0.8 3 ASTM D955 Mold Shrinkage, flow, 24 hrs (2) 0.7 – 0.9 8 ASTM D955 Mold Shrinkage, flow, 24 hrs (2) 0.7 – 0.9 8 ASTM D955 Mold Shrinkage, flow, 24 hrs (2) 0.7 – 0.9 8 ASTM D955 Mold Shrinkage, flow, 24 hrs (2) 0.8 ASTM D955 Mold Shrinkage, flow, 24 hrs (2) 0.294 8 0.294 Mold Shrinkage, flow, 24 hrs (2) 9.294 Mold Shrinkage, flow, 24 hrs (2) No 294 No 29	CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ISO 11359-2
PHYSICAL ¹⁰ Density 1.23 gr.m³ ASTM D792 Moisture Absorption, (23°C/50% RH/24 hrs) 0.1 \$ ASTM D570 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.6 - 0.8 \$ ASTM D955 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.7 - 0.9 \$ ASTM D955 Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.74 \$ 50 294 Mold Shrinkage, xflow, 24 hrs ⁽²⁾ 0.84 \$ 50 294 Besity 1.23 3 (2) 3 (2) 3 (2) Besity 1.23 3 (2) 3 (2) 3 (2) Bufface Resistivity 3 (2) 3 (2) 3 (2) 3 (2) Bufface Resistivity 3 (2)	HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Bf
Desity1.239/cm²A5M D792Moisture Absorption, (23°C/50% RH/24 hrs)1.243.24A5M D570Mold Shrinkage, flow, 24 hrs (²)0.6 - 0.8%A5M D955Mold Shrinkage, flow, 24 hrs (²)0.7 - 0.9%A5M D955Mold Shrinkage, flow, 24 hrs (²)0.74%50 294Mold Shrinkage, flow, 24 hrs (²)0.84%50 294Mold Shrinkage, flow, 24 hrs (²)0.84%50 294Desity1.23yy50 183Bufface Resistivity (³)1.242.24X5M D257Dying Temperature1.202.24X5M D257Dying Temperature1.202.24X5M D257Maximum Moisture Content0.22.24X5M D257Melt Temperature3.05 - 3.252.24X5M D257Pront - Zone 3 Temperature3.05 - 3.252.24X5M D257Middle - Zone 2 Temperature3.07 - 3.022.24X5M D257Mold Temperature3.07 - 3.022.24X5M D257Mold Temperature3.07 - 3.022.24X5M D257Mold Temperature3.07 - 3.022.24X5M D257Mold Temperature3.07 - 3.023.023.02Mold Temperature3.07 - 3.023.023.02Mold Temperature3.07 - 3.023.023.02Mold Temperature3.02 - 3.023.023.02Mold Temperature3.02 - 3.023.023.02Mold Temperature3.02 - 3.023.023.02Mold	HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	126	°C	ISO 75/Af
Moisture Absorption, (23°C/50% RH/24 hrs) Mold Shrinkage, flow, 24 hrs ⁽²⁾ Mold Shrinkage, flow, 2	PHYSICAL (1)			
Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.6 - 0.8%ASTM D955Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.7 - 0.9%\$\$Mold Shrinkage, flow, 24 hrs ⁽²⁾ 0.74\$\$\$Mold Shrinkage, xflow, 24 hrs ⁽²⁾ 0.84\$\$\$Desity1.23\$\$\$\$BLECTRICAL ⁽¹⁾ Usurface Resistivity ⁽³⁾ ASTM D257Dying Temperature120\$\$Dying Time4\$\$Maximum Moisture Content0.02\$\$Melt Temperature305 - 325\$\$Font - Zone 3 Temperature305 - 325\$\$Middle - Zone 2 Temperature310 - 320\$\$Middle - Zone 1 Temperature305 - 305\$\$Mold Temperature30 - 100\$\$Mold Temperature30 - 100\$\$Mold Temperature30 - 100\$\$Mold Temperature30 - 100\$\$Mold Temperature30 - 100\$\$	Density	1.23	g/cm³	ASTM D792
Mold Shrinkage, xflow, 24 hrs (2)0.7 - 0.9%ASTM D955Mold Shrinkage, flow, 24 hrs (2)0.74%150 294Mold Shrinkage, xflow, 24 hrs (2)0.84%150 294Density1.23g/cm³150 1183ELECTRICAL (1)Surface Resistivity (3)1.2403 - 1.2409MASTM D257INJECTION MOLDING (4)Drying Temperature120°C**Drying Time4Hrs**Maximum Moisture Content0.02%**Melt Temperature305 - 325°C**Front - Zone 3 Temperature310 - 320°C**Middle - Zone 2 Temperature310 - 320°C**Mold Temperature305 - 305°C**Mold Temperature80 - 110°C**Mold Temperature80 - 110William**Mold Temperature80 - 110MPa**	Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)0.74%\$0.294Mold Shrinkage, xflow, 24 hrs (2)0.84%150.294Density1.23g/cm³\$15.1183ELECTRICAL (1)Usuface Resistivity (3)1.24031.24032.24This pring Temperature1.200.2XTM D.257Drying Time4HrsMaximum Moisture Content0.02%YMelt Temperature305-325°CYFront- Zone 3 Temperature305-323°CYMiddle- Zone 2 Temperature301-320°CYRear- Zone 1 Temperature295-305°CYMold Temperature80-110°CYMold Temperature0.2-0.3MPa	Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.6 - 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (²)9.84\$10.294Density1.231.291.29BLECTRICAL (¹)Surface Resistivity (³)1.24 + 0.3 + 1.24 + 0.92.0ASTM D257INJECTION MOLDING (¹)Drying Temperature1.20°C***Drying Time4Hrs***Maximum Moisture Content0.02%*****Melt Temperature305 - 325°C***Front - Zone 3 Temperature302 - 330°C***Middle - Zone 2 Temperature309 - 305°C***Mel Temperature95 - 305°C***Mold Temperature80 - 110°C***Mold Temperature90 - 110°C***Back Pressure10 - 20.33MPa***	Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.7 – 0.9	%	ASTM D955
DensityJ.23g/cm³ISO 1183ELECTRICAL **IJ.E+03 − 1.E+09QASTM D257INJECTION MOLDING**(4)Drying Temperature120°CDrying Time4HrsMaximum Moisture Content0.02%Intertage Temperature305 − 325°CFront - Zone 3 Temperature320 − 330°CMiddle - Zone 2 Temperature310 − 320°CMear - Zone 1 Temperature295 − 305°CMold Temperature80 − 110°CBack Pressure0.2 − 0.3MPa	Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.74	%	ISO 294
ELECTRICAL (1) Surface Resistivity (3) Intercion MolDino (4) Drying Temperature 120 Aximum Moisture Content 200 Aximum Moisture Content 305 - 325 Aximum Moisture 170 Aximum Moisture 200 Aximum Moisture 200 Aximum Moisture 200 Aximum Moisture 300 Aximum Moisture 300 Aximum Moisture 300 Aximum Moisture 300 Aximum Moisture 400 Aximum Moisture 500 Aximum Moisture 500 Aximum Moisture 600	Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.84	%	ISO 294
Surface Resistivity (3) 1.E403 – 1.E409 1.E403 – 1.E409 1.E403 – 1.E409 1.E403 – 1.E403 1.E403 – 1.E403 – 1.E403 1.E403 – 1.E403 – 1.E403 1.E403 – 1.E4	Density	1.23	g/cm³	ISO 1183
INJECTION MOLDING ⁽⁴⁾ Drying Temperature120°CDrying TimeHrsMaximum Moisture Content0.02%Melt Temperature305 – 325°CFront - Zone 3 Temperature320 – 330°CMiddle - Zone 2 Temperature310 – 320°CRear - Zone 1 Temperature295 – 305°CMold Temperature80 – 110°CBack PressureMPa	ELECTRICAL (1)			
Drying Temperature 120 °C Drying Time 4 Hrs Maximum Moisture Content 0.02 % Melt Temperature 305 – 325 °C Front - Zone 3 Temperature 320 – 330 °C Middle - Zone 2 Temperature 310 – 320 °C Rear - Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Back Pressure MPa	Surface Resistivity (3)	1.E+03 – 1.E+09	Ω	ASTM D257
Drying Time 4 4 Maximum Moisture Content 0.02 % Melt Temperature 305 – 325 °C Front - Zone 3 Temperature 320 – 330 °C Middle - Zone 2 Temperature 310 – 320 °C Rear - Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Mold Temperature 80 – 100 °C Mold Temperature 80 – 110 °C Mold Temperature 90 – 90 °C Mold Temperature 90 °C	INJECTION MOLDING (4)			
Maximum Moisture Content 0.02 % Melt Temperature 305 – 325 °C Front - Zone 3 Temperature 320 – 330 °C Middle - Zone 2 Temperature 310 – 320 °C Rear - Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Back Pressure 0.2 – 0.3 MPa	Drying Temperature	120	°C	
Melt Temperature 305-325 °C Front - Zone 3 Temperature 320-330 °C Middle - Zone 2 Temperature 310-320 °C Rear - Zone 1 Temperature 295-305 °C Mold Temperature 80-110 °C Back Pressure 0.2-0.3 MPa	Drying Time	4	Hrs	
Front - Zone 3 Temperature 320 – 330 °C Middle - Zone 2 Temperature 310 – 320 °C Rear - Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Back Pressure 0.2 – 0.3 MPa	Maximum Moisture Content	0.02	%	
Middle - Zone 2 Temperature 310 – 320 °C Rear - Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Back Pressure 0.2 – 0.3 MPa	Melt Temperature	305 – 325	°C	
Rear-Zone 1 Temperature 295 – 305 °C Mold Temperature 80 – 110 °C Back Pressure 0.2 – 0.3 MPa	Front - Zone 3 Temperature	320 – 330	°C	
Mold Temperature 80 – 110 °C Back Pressure 0.2 – 0.3 MPa	Middle - Zone 2 Temperature	310 – 320	°C	
Back Pressure 0.2 – 0.3 MPa	Rear - Zone 1 Temperature	295 – 305	°C	
	Mold Temperature	80 – 110	°C	
Screw Speed 30 – 60 ppm	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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

DISCLAIMER

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⁽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.