

LNPT[™] STAT-KON[™] COMPOUND MD000EXJ

DESCRIPTION

LNP STAT-KON MD000EXJ compound is based on Polypropylene resin that has been designed towards injection moulding of electrically conductive thin-walled parts for the medical devices industry. Added features of this grade include: Electrically Conductive, extreme flow, excellent moldability.

GENERAL INFORMATION	
Features	Chemical Resistance, Electrically Conductive, Exceptional Processing, Food Contact Acceptable, High Flow, Superior Molding, Easy Flow, Healthcare
Polymer Types	Polypropylene, Unspecified (PP, Unspecified)
Processing Techniques	Injection Molding

TYPICAL PROPERTY VALUES

Revision 20241212

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Modulus, 1 mm/min	1780	MPa	ISO 527
Tensile Stress, break, 5 mm/min	25	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Flexural Modulus, 2 mm/min	1700	MPa	ISO 178
Flexural Strength, 2 mm/min	42	MPa	ISO 178
Tensile Modulus, 5 mm/min	1800	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	25	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.2	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	1600	MPa	ASTM D790
Flexural Strength, 1.3 mm/min, 50 mm span	45	MPa	ASTM D790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m ²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	49	kJ/m ²	ISO 179/1eU
Izod Impact, notched, 23°C	30	J/m	ASTM D256
Izod Impact, unnotched, 23°C	660	J/m	ASTM D4812
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	64	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	105	°C	ISO 75/Bf
HDT, 1.82 MPa, 3.2mm, unannealed	60	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	105	°C	ASTM D648
Vicat Softening Temp, Rate B/50	105	°C	ISO 306
Vicat Softening Temp, Rate B/120	106	°C	ISO 306
Vicat Softening Temp, Rate B/50	105	°C	ASTM D1525
Vicat Softening Temp, Rate B/120	106	°C	ASTM D1525
CTE, -40°C to 40°C, flow	8.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, flow	8.8E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	9.4E-05	1/°C	ASTM E831
PHYSICAL			
Density	1.0	g/cm ³	ISO 1183
Mold Shrinkage, flow	1.0 – 1.5	%	SABIC method
Mold Shrinkage, xflow	1.0 – 1.6	%	SABIC method
Melt Volume Rate			
Melt Volume Rate, MVR at 230°C/2.16 kg	45	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 190°C/2.16 kg	17	cm ³ /10 min	ISO 1133
Specific Gravity	1.01	-	ASTM D792
Melt Flow Rate, 190°C/2.16 kgf	15	g/10 min	ASTM D1238
ELECTRICAL			
Surface Resistivity, ROA	<1E+03	Ω	IEC 60093
Volume Resistivity	<1E+03	Ω.cm	IEC 60093
Surface Resistivity	<1E+03	Ω	ASTM D257
Volume Resistivity	<1E+03	Ω.cm	ASTM D257
ELECTRICAL PROPERTIES			
Volume resistivity	<15	Ω.cm	SABIC method
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Melt Temperature	210 – 260	°C	
Mold Temperature	50 – 80	°C	

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.

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