

LNPTM STAT-KONTM COMPOUND DD000XI

DESCRIPTION

LNP STAT-KON DD000XI is a compound based on Polycarbonate co-polymer resin containing carbon powder. Added features of this grade include: electrically conductive, improved impact properties, hydrolytic stability and complying with latest ATEX regulations

TYPICAL PROPERTY VALUES

Revision 20200521

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	55	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Tensile Stress, yld, Type I, 50 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	45	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	12	%	ASTM D 638
Tensile Modulus, 50 mm/min	2550	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2100	MPa	ASTM D 790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	24	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	230	J/m	ASTM D 256
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	10	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Multi-Axial Instrumented Impact Total Energy, 23°C	62	J	ISO 6603-2
Multi-Axial Instrumented Impact Energy @ peak, 23°C	60	J	ISO 6603-2
THERMAL			
Vicat Softening Temp, Rate B/50	145	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	129	°C	ISO 75/Af
Vicat Softening Temp, Rate B/50	145	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	139	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.30E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.20E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.30E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	6.20E-05	1/°C	ISO 11359-2
PHYSICAL			
Density	1.21	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.06 – 0.12	%	ISO 62
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Specific Gravity	1.21	-	ASTM D 792
Melt Volume Rate, MVR at 300°C/2.16 kg	5	cm ³ /10 min	ISO 1133
Mold Shrinkage, flow	0.6 – 1.0	%	SABIC method
Mold Shrinkage, xflow	0.6 – 1.0	%	SABIC method
ELECTRICAL			
Surface Resistivity	1.E+6 – 1.E+10	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	48	hrs	
Maximum Moisture Content	0.02	%	
Hopper Temperature	40 – 60	°C	
Melt Temperature	295 – 335	°C	
Rear - Zone 1 Temperature	275 – 315	°C	
Middle - Zone 2 Temperature	285 – 325	°C	
Front - Zone 3 Temperature	295 – 335	°C	
Nozzle Temperature	290 – 330	°C	
Mold Temperature	70 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	normal	rpm	
Shot to Cylinder Size	30 – 60	%	
Vent Depth	0.025 – 0.076	mm	

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