LNP™ STAT-KON™ COMPOUND WD000

DESCRIPTION

LNP STAT-KON WD000 compound is based on Polybutylene Terephthalate (PBT) resin containing proprietary fillers. Added features of this grade include: Electrically Conductive, Radar Absorbing

GENERAL INFORMATION	
Features	Electrically Conductive, Radar Absorption, No PFAS intentionally added
Fillers	Proprietary Filler
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	54	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D638
Tensile Modulus, 5 mm/min	3210	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	98	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3210	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	54	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	3160	MPa	ISO 527
Flexural Strength, 2 mm/min	99	MPa	ISO 178
Flexural Modulus, 2 mm/min	3105	MPa	ISO 178
Flexural Strain, break, 2 mm/min	4	%	ISO 178
Flexural Stress, break, 2 mm/min	98	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	240	J/m	ASTM D4812
Izod Impact, notched, 23°C	25	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	0.29	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	18	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	84.5	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	85	°C	ISO 75/Af
CTE, -40°C to 40°C, flow	8.0E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.0E-05	1/°C	ASTM E831
PHYSICAL [1]			
Specific Gravity	1.357	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24hrs)	0.02	%	ISO 62-4
Mold Shrinkage, flow	2 – 2.5	%	SABIC method
Mold Shrinkage, xflow	2 – 2.5	%	SABIC method

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL [1]			
Dielectric Constant (Dk), 77 GHz [2]	12	-	
Dissipation Factor (Df), 77 GHz [2]	0.537	-	
Dielectric Constant (Dk), 24 GHz [2]	15	-	
Dissipation Factor (Df), 24 GHz [2]	0.799	-	
Surface Resistivity	1E1 – 1E4	Ω	ASTM D257
Volume Resistivity	1E0 – 1E3	Ω.cm	ASTM D257
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
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.

(2) The measurement is based on the Free Space Method.

(3) 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.

DISCLAIMER