LNP™ STAT-KON™ COMPOUND WJF40ERI

DESCRIPTION

LNP STAT-KON WJF40ERI is a compound based on Polybutylene terephthalate (PBT) resin containing 20% Glass Fiber, and a proprietary microwave absorbing filler. Added feature of this material is Impact Modified.

GENERAL INFORMATION

Features	EMI/RFI Shielding, Good Processability, Radar Absorption, Impact resistant, No PFAS intentionally added
Fillers	Glass Fiber, Proprietary Filler
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding, Extrusion, Compression molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Hydrocarbon and Energy	Electric Vehicle
Industrial	Electronic Material

TYPICAL PROPERTY VALUES

Revision 20250224

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break, 5 mm/min	105	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.8	%	ISO 527
Tensile Modulus, 1 mm/min	6500	MPa	ISO 527
Flexural Modulus, 2 mm/min	5800	MPa	ISO 178
Flexural Stress, break, 2 mm/min	155	MPa	ISO 178
Tensile Modulus, 5 mm/min	8800	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.2	%	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	109	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	5800	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	166	MPa	ASTM D790
IMPACT [1]			
Izod Impact, notched 80*10*4 +23°C	12	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	56	kJ/m²	ISO 180/1U
Izod Impact, notched, 23°C	140	J/m	ASTM D256
Izod Impact, unnotched, 23°C	860	J/m	ASTM D4812
THERMAL [1]			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	197	°C	ISO 75/Af
HDT, 1.82 MPa, 3.2mm, unannealed	203	°C	ASTM D648
PHYSICAL [1]			
Mold Shrinkage, flow [2]	0.4	%	SABIC method
Specific Gravity	1.39	-	ASTM D792
Melt Flow Rate, 280°C/5.0 kgf	32	g/10 min	ASTM D1238

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL [1]			
Dielectric Constant			
77 GHz	7.26	-	SABIC method
Dissipation Factor			
77 GHz	0.52	-	SABIC method
Surface Resistivity	1.0E+08 – 1.0E+12	Ω	ASTM D257
Volume Resistivity	1.0E+08 – 1.0E+12	Ω.cm	ASTM D4496
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	275 – 285	°C	
Nozzle Temperature	270 – 270	°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	

(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) 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

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