

# LNPT<sup>TM</sup> STAT-KON<sup>TM</sup> COMPOUND WEF42ISP

## DESCRIPTION

LNP STAT-KON WEF42ISP compound is based on Polybutylene Terephthalate (PBT) resin containing 20% glass fiber and 10% carbon fiber. Added features of this grade include: High Impact, Heat Stabilized and Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Heat Stabilized, High Impact Resistance, Super Strong (Carbon Fiber Filled), High Stiffness, Light-weight Structural
Fillers	Carbon Fiber, Glass Fiber
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Industrial	Semiconductors, Electronic Material Handling, Electronic Material

## TYPICAL PROPERTY VALUES

Revision 20210812

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield, 5 mm/min	136	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	11200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	205	MPa	ISO 178
Flexural Modulus, 2 mm/min	9600	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	65	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	209	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	0.1 – 0.2	%	SABIC method
Density	1.45	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(3)</sup>	1.E+04 – 1.E+06	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
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	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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) 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.

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