



## LNP™ STAT-KON™ Compound MFD02

### Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound MF-10

Product reorder name: MFD02

LNP STAT-KON MFD02 is a compound based on Polypropylene resin containing 10% Glass Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yield	280	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, break	210	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yield	3.2	%	ASTM D 638
Tensile Strain, break	6.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	28100	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Modulus	21000	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield	28	MPa	ISO 527
Tensile Stress, break	23	MPa	ISO 527
Tensile Strain, yield	2.9	%	ISO 527
Tensile Strain, break	4.1	%	ISO 527
Tensile Modulus, 1 mm/min	2430	MPa	ISO 527
Flexural Stress	43	MPa	ISO 178
Flexural Modulus	2200	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	38	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	13	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	170	cm-kgf	ASTM D 3763
Multiaxial Impact	121	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	27	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	133	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	85	°C	ASTM D 648

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) 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.

(6) Needs hard coat to consistently pass 60 sec Vertical Burn.



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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>THERMAL</b>			
CTE, -40°C to 40°C, flow	1.03E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.48E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.03E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	127	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	81	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.05	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	1.1 - 1.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.1 - 1.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.2	%	ISO 294
Density	1.05	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL</b>			
Surface Resistivity	1.E+01 - 1.E+03	Ohm	ASTM D 257

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
Drying Temperature	80	°C
Drying Time	4	hrs
Melt Temperature	225 - 250	°C
Front - Zone 3 Temperature	240 - 250	°C
Middle - Zone 2 Temperature	215 - 225	°C
Rear - Zone 1 Temperature	195 - 205	°C
Mold Temperature	30 - 50	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

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