

LNP* Stat-kon* Compound MFD03

Asia Pacific: COMMERCIAL

Also known as: MF-15

Product Reorder Name: MFD03

LNP* Stat-kon* MFD03 is a compound based on Polypropylene resin containing Glass Fiber, Carbon Powder. Added features of this material include: Electrically Conductive.

Property

TYPICAL PROPERTIES (1)				
MECHANICAL	Value	Unit	Standard	
Tensile Stress, yield	34	MPa	ASTM D 638	
Tensile Stress, break	16	MPa	ASTM D 638	
Tensile Strain, yield	2.7	%	ASTM D 638	
Tensile Strain, break	6.9	%	ASTM D 638	
Tensile Modulus, 50 mm/min	3440	MPa	ASTM D 638	
Flexural Modulus	2750	MPa	ASTM D 790	
Tensile Stress, yield	34	MPa	ISO 527	
Tensile Stress, break	15	MPa	ISO 527	
Tensile Strain, yield	2.6	%	ISO 527	
Tensile Strain, break	5.7	%	ISO 527	
Tensile Modulus, 1 mm/min	3310	MPa	ISO 527	
Flexural Stress	51	MPa	ISO 178	
Flexural Modulus	3000	MPa	ISO 178	
IMPACT	Value	Unit	Standard	
Izod Impact, unnotched, 23°C	138	J/m	ASTM D 4812	
Izod Impact, notched, 23°C	347	J/m	ASTM D 256	
Instrumented Impact Energy @ peak, 23°C	13	J	ASTM D 3763	
Multiaxial Impact	5	J	ISO 6603	
Izod Impact, unnotched 80*10*4 +23°C	12	kJ/m²	ISO 180/1U	
Izod Impact, notched 80*10*4 +23°C	22	kJ/m²	ISO 180/1A	
THERMAL	Value	Unit	Standard	
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D 648	
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D 648	
CTE, -40°C to 40°C, flow	1.04E-04	1/°C	ASTM E 831	
CTE, -40°C to 40°C, xflow	4.68E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, flow	1.05E-04	1/°C	ISO 11359-2	
CTE, -40°C to 40°C, xflow	4.7E-05	1/°C	ISO 11359-2	
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	142	°C	ISO 75/Bf	
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Af	
PHYSICAL	Value	Unit	Standard	
Density	1.07	g/cm³	ASTM D 792	
Mold Shrinkage, flow, 24 hrs	1	%	ASTM D 955	
Mold Shrinkage, xflow, 24 hrs	0.9	%	ASTM D 955	
Mold Shrinkage, flow, 24 hrs	1	%	ISO 294	
Mold Shrinkage, xflow, 24 hrs	0.92	%	ISO 294	
Density	1.07	g/cm³	ISO 1183	

Processing

Parameter		
Injection Molding	Value	Unit
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

Source GMD, last updated:09/26/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(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.

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- (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.

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