



LNP™ STAT-KON™ Compound DEF42

Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound DCF-1006

Product reorder name: DEF42

LNP STAT-KON™ DEF42 is a compound based on Polycarbonate resin containing 20% Glass Fiber, 10% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1250	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	117200	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1920	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	104000	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	125	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.4	%	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	11410	MPa	ISO 527
Flexural Stress	186	MPa	ISO 178
Flexural Modulus, 2 mm/min	10240	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	69	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Multiaxial Impact	41	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	150	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	41	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	142	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.6E-05	1/°C	ASTM E 831



LNP™ STAT-KON™ Compound DEF42

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -40°C to 40°C, xflow	5.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.41	-	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.06 - 0.08	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Density	1.4	g/cm ³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+02 - 1.E+05	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	2.4	mm	UL 94



LNP™ STAT-KON™ Compound DEF42

Americas: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	305 - 325	°C
Front - Zone 3 Temperature	320 - 330	°C
Middle - Zone 2 Temperature	310 - 320	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm