



LNP™ THERMOTUF™ Compound V1000UXC

Americas: COMMERCIAL

Also known as: LNP™ THERMOTUF™ Compound V-1000 UV HP

Product reorder name: V1000UXC

LNP THERMOTUF V1000UXC is a compound based on unfilled Super Tough Nylon resin. Added feature of this material is: UV Stabilized.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	390	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	390	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	57.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	84.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	17400	kgf/cm ²	ASTM D 638
Flexural Stress	560	kgf/cm ²	ASTM D 790
Flexural Modulus	21000	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	41	MPa	ISO 527
Tensile Stress, break, 5 mm/min	41	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	146.7	%	ISO 527
Tensile Strain, break, 5 mm/min	165	%	ISO 527
Tensile Modulus, 1 mm/min	1650	MPa	ISO 527
Flexural Stress	53	MPa	ISO 178
Flexural Modulus	1700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	cm-kgf/cm	ASTM D 4812
Multiaxial Impact	503	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	507	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	192	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	193	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.35E-04	1/°C	ASTM E 831



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -40°C to 40°C, xflow	1.33E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.34E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.34E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	150	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.07	-	ASTM D 792
Density	1.065	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.6	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	2.1 - 2.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2.5 - 2.7	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	2.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	2.6	%	ISO 294
Density	1.08	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	270 - 295	°C
Front - Zone 3 Temperature	290 - 300	°C
Middle - Zone 2 Temperature	270 - 280	°C
Rear - Zone 1 Temperature	260 - 270	°C
Mold Temperature	50 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	10 - 60	rpm