



LNP™ THERMOCOMP™ Compound ZF0049

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound ZF-1004 FR HP

Product reorder name: ZF0049

LNP THERMOCOMP ZF0049 is a compound based on PPO resin containing 20% Glass Fiber. Added feature of this material is: Flame Retardant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	900	kgf/cm ²	ASTM D 638
Tensile Stress, break	900	kgf/cm ²	ASTM D 638
Tensile Strain, yield	1.7	%	ASTM D 638
Tensile Strain, break	1.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	70300	kgf/cm ²	ASTM D 638
Flexural Stress	2460	kgf/cm ²	ASTM D 790
Flexural Modulus	126500	kgf/cm ²	ASTM D 790
Tensile Stress, yield	84	MPa	ISO 527
Tensile Stress, break	84	MPa	ISO 527
Tensile Strain, yield	1.6	%	ISO 527
Tensile Strain, break	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	6830	MPa	ISO 527
Flexural Stress	118	MPa	ISO 178
Flexural Modulus	6600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	42	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	151	cm-kgf	ASTM D 3763
Multiaxial Impact	32	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	110	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	102	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.76E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.96E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.8E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	111	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	104	°C	ISO 75/Af
PHYSICAL			
Density	1.3	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.28	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.49	%	ISO 294
Density	1.29	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Melt Temperature	300 - 305	°C
Front - Zone 3 Temperature	300 - 310	°C
Middle - Zone 2 Temperature	290 - 300	°C
Rear - Zone 1 Temperature	275 - 290	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm