



LNP™ THERMOCOMP™ Compound DF0046P

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound DF-1004 EP FR ECO

Product reorder name: DF0046P

LNP THERMOCOMP DF0046P is a compound based on Polycarbonate resin containing 20% Glass Fiber. Added features include: Exceptional Processing, Non-Brominated & Non-Chlorinated Flame Retardant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	970	kgf/cm ²	ASTM D 638
Tensile Strain, break	3.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	62800	kgf/cm ²	ASTM D 638
Flexural Stress	1400	kgf/cm ²	ASTM D 790
Flexural Modulus	60900	kgf/cm ²	ASTM D 790
Tensile Stress, break	97	MPa	ISO 527
Tensile Strain, break	3.3	%	ISO 527
Tensile Modulus, 1 mm/min	6920	MPa	ISO 527
Flexural Stress	151	MPa	ISO 178
Flexural Modulus	6560	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	47	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	7	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	107	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	137	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.68E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.13E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.13E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.97E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Af



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Density	1.37	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.4	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Density	1.37	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP



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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