



LNP™ THERMOCOMP™ Compound DF006HL

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound DF-1006 LE

Product reorder name: DF006HL

LNP THERMOCOMP™ DF006HL is a compound based on Polycarbonate resin containing 30% Glass Fiber. Added features of this material include: Low Extractible, Healthcare.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1290	kgf/cm ²	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	1170	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1160	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.7	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	85000	kgf/cm ²	ASTM D 638
Flexural Stress	2030	kgf/cm ²	ASTM D 790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1860	kgf/cm ²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1830	kgf/cm ²	ASTM D 790
Flexural Modulus	85200	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	76400	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	110	MPa	ISO 527
Tensile Stress, break, 5 mm/min	110	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.8	%	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	7800	MPa	ISO 527
Flexural Stress	174	MPa	ISO 178
Flexural Modulus, 2 mm/min	7200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	84	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	17	cm-kgf/cm	ASTM D 256



LNP™ THERMOCOMP™ Compound DF006HL

Americas: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
IMPACT			
Multiaxial Impact	83	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	281	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	52	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	144	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.9E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.43	-	ASTM D 792
Density	1.43	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.5 - 0.8	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62



LNP™ THERMOCOMP™ Compound DF006HL

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