



Americas: COMMERCIAL

LNP* Thermocomp* Compound DF0046P

Also known as: DF-1004 EP FR ECO Product Reorder Name: DF0046P

LNP* Thermocomp* DF0046P is a compound based on Polycarbonate resin containing Glass Fiber, Flame Retardant. Added features of this material include: Exceptional Processing, Flame Retardant, Non-Brominated & Non-Chlorinated Flame Retardant.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	95	MPa	ASTM D 638
Tensile Strain, break	3.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	6160	MPa	ASTM D 638
Flexural Stress	137	MPa	ASTM D 790
Flexural Modulus	5970	MPa	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	Value	Unit	Standard
Izod Impact, unnotched, 23°C	467	J/m	ASTM D 4812
Izod Impact, notched, 23°C	74	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
THERMAL HDT, 0.45 MPa, 3.2 mm, unannealed	Value 140	Unit °C	Standard ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed	140	°C	ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed	140 137	°C	ASTM D 648 ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow	140 137 4.68E-05	°C °C 1/°C	ASTM D 648 ASTM D 648 ASTM E 831
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow	140 137 4.68E-05 1.13E-04	°C °C 1/°C 1/°C	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow	140 137 4.68E-05 1.13E-04 2.13E-05	°C °C 1/°C 1/°C 1/°C	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05	°C °C 1/°C 1/°C 1/°C 1/°C	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138	°C °C 1/°C 1/°C 1/°C 1/°C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value	°C °C 1/°C 1/°C 1/°C 1/°C 0 1/°C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, flow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Density	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value 1.37	°C °C 1/°C 1/°C 1/°C 1/°C 0 C Unit g/cm³ %	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard ASTM D 792
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Density Moisture Absorption, 50% RH, 24 hrs	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value 1.37 0.4	°C °C 1/°C 1/°C 1/°C 1/°C 0 C Unit g/cm³ %	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard ASTM D 792 ASTM D 570
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value 1.37 0.4 0.2 - 0.4	°C °C 1/°C 1/°C 1/°C 1/°C 0 C Unit g/cm³ %	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard ASTM D 792 ASTM D 570 ASTM D 955
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value 1.37 0.4 0.2 - 0.4 0.3 - 0.5	°C °C 1/°C 1/°C 1/°C 0 C 1/°C 0 C Unit g/cm³ % %	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard ASTM D 792 ASTM D 570 ASTM D 955 ASTM D 955
HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow CTE, -40°C to 40°C, flow CTE, -40°C to 40°C, xflow HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Density Moisture Absorption, 50% RH, 24 hrs Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, xflow, 24 hrs Density	140 137 4.68E-05 1.13E-04 2.13E-05 6.97E-05 138 Value 1.37 0.4 0.2 - 0.4 0.3 - 0.5 1.37	°C °C 1/°C 1/°C 1/°C 1/°C 0 1/°C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ASTM D 648 ASTM D 648 ASTM E 831 ASTM E 831 ISO 11359-2 ISO 11359-2 ISO 75/Af Standard ASTM D 792 ASTM D 570 ASTM D 955 ASTM D 955 ISO 1183

Source GMD, last updated:12/06/2005

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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