

Americas: COMMERCIAL

LNP* Lubricomp* Compound DFI12E

Also known as: DFL-4412 EM Product Reorder Name: DFI12E

LNP* Lubricomp* DFI12E is a compound based on Polycarbonate resin containing Glass Fiber, Silicone. Added features of this material include: Internally Lubricated, Easy Molding.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	80	MPa	ASTM D 638
Tensile Stress, break	78	MPa	ASTM D 638
Tensile Strain, yield	3.5	%	ASTM D 638
Tensile Strain, break	4.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D 638
Flexural Modulus	4130	MPa	ASTM D 790
Tensile Stress, yield	81	MPa	ISO 527
Tensile Stress, break	79	MPa	ISO 527
Tensile Strain, yield	3.4	%	ISO 527
Tensile Strain, break	3.8	%	ISO 527
Tensile Modulus, 1 mm/min	4210	MPa	ISO 527
Flexural Stress	125	MPa	ISO 178
Flexural Modulus	4000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	795	J/m	ASTM D 4812
Izod Impact, notched, 23°C	133	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	5	J	ASTM D 3763
Multiaxial Impact	9	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	50	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	136	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.12E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.7E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	142	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.27	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.49	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.57	%	ISO 294

Density 1.27 g/cm³ ISO 1183

Source GMD, last updated:08/02/2007

Processing

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.

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- (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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