

LNP* Lubricomp* Compound DFL22

Asia Pacific: COMMERCIAL

Also known as: DFL-4022
Product Reorder Name: DFL22

LNP* Lubricomp* DFL22 is a compound based on Polycarbonate resin containing Glass Fiber, PTFE. Added features of this material include: Internally Lubricated.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	71	MPa	ASTM D 638
Tensile Stress, break	67	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	72	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	68	MPa	ASTM D 638
Tensile Strain, yield	3.3	%	ASTM D 638
Tensile Strain, break	5.5	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D 638
Flexural Modulus	4130	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4140	MPa	ASTM D 790
Tensile Stress, yield	71	MPa	ISO 527
Tensile Stress, break	67	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	71	MPa	ISO 527
Tensile Stress, break, 5 mm/min	67	MPa	ISO 527
Tensile Strain, yield	3.3	%	ISO 527
Tensile Strain, break	5.8	%	ISO 527
Tensile Strain, yield, 5 mm/min	3.3	%	ISO 527
Tensile Strain, break, 5 mm/min	5.8	%	ISO 527
Tensile Modulus, 1 mm/min	4150	MPa	ISO 527
Flexural Stress	118	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	118	MPa	ISO 178
Flexural Modulus	3900	MPa	ISO 178
Flexural Modulus, 2 mm/min	3900	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	736	J/m	ASTM D 4812
Izod Impact, notched, 23°C	144	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	23	J	ASTM D 3763
Multiaxial Impact	6	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	48	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	140	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.58E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.58E-05	1/°C	ASTM E 831

CTE, -40°C to 40°C, flow	5.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, flow	5.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	140	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.34	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.65	%	ISO 294
Wear Factor Washer	165	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.37	-	ASTM D 3702 Modified
Static COF	0.43	-	ASTM D 3702 Modified
Density	1.33	g/cm ³	ISO 1183

Source GMD, last updated:09/24/2008

Processing

Parameter	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

Source GMD, last updated:09/24/2008

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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