LNP™ LUBRICOMP™ COMPOUND DFL22ER

DFL-4022 EM MR

DESCRIPTION

LNP* LUBRICOMP* DFL22ER is a compound based on Polycarbonate resin containing 10% Glass Fiber and 10% PTFE. Added features of this material include: Wear Resistant, Easy Molding, Mold Release.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	71	MPa	ASTM D 638
Tensile Stress, break	67	MPa	ASTM D 638
Tensile Strain, yield	3.3	%	ASTM D 638
Tensile Strain, break	5.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D 638
Flexural Modulus	4130	MPa	ASTM D 790
Tensile Stress, yield	71	MPa	ISO 527
Tensile Stress, break	67	MPa	ISO 527
Tensile Strain, yield	3.3	%	ISO 527
Tensile Strain, break	5.8	%	ISO 527
Tensile Modulus, 1 mm/min	4150	MPa	ISO 527
Flexural Stress	118	MPa	ISO 178
Flexural Modulus	3900	MPa	ISO 178
IMPACT			
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/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
THERMAL			
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
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			
Density	1.34	g/cm³	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

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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: Manual
Dynamic COF	0.37	-	ASTM D 3702 Modified: Manual
Static COF	0.43	-	ASTM D 3702 Modified: Manual
Density	1.33	g/cm³	ISO 1183
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	

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