LNP™ LUBRICOMP™ COMPOUND DCP32

DCL-4532
REGION ASIA

DESCRIPTION

LNP* LUBRICOMP* DCP32 is a compound based on Polycarbonate resin containing 15% PTFE/Silicone, 10% Carbon Fiber. Added features of this material include: Electrically Conductive, Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20181102

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	92	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	92	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	7580	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	139	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6210	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	93	MPa	ISO 527
Tensile Stress, break, 5 mm/min	93	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.2	%	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	7470	MPa	ISO 527
Flexural Stress	142	MPa	ISO 178
Flexural Modulus, 2 mm/min	6700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	443	J/m	ASTM D 4812
Izod Impact, notched, 23°C	90	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	18	J	ASTM D 3763
Multiaxial Impact	5	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	147	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	143	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.14E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.1E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	148	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Af
PHYSICAL			
Density	1.3	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4 – 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.43	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.54	%	ISO 294
Wear Factor Washer	49	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.35	-	ASTM D 3702 Modified: Manual
Static COF	0.36	-	ASTM D 3702 Modified: Manual
Density	1.3	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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