LNP™ LUBRILOY™ COMPOUND DF2041

DF-20 FR ECO
REGION ASIA

DESCRIPTION

LNP LUBRILOY* DF2041 is a compound based on Polycarbonate resin containing 20% Glass Fiber, Proprietary Lubricant. Added features include: Flame Retardant, Wear Resistant.

INDUSTRY	SUB INDUSTRY
Consumer	Home Appliances
Electrical and Electronics	Electrical Devices and Displays

TYPICAL PROPERTY VALUES

Revision 20191031

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	101	MPa	ASTM D 638
Tensile Strain, break	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	6680	MPa	ASTM D 638
Flexural Stress	153	MPa	ASTM D 790
Flexural Modulus	6370	MPa	ASTM D 790
Tensile Stress, break	100	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	6830	MPa	ISO 527
Flexural Stress	149	MPa	ISO 178
Flexural Modulus	6270	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	603	J/m	ASTM D 4812
Izod Impact, notched, 23°C	154	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	11	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	36	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	102	°C	ISO 75/Af
Relative Temp Index, Elec (1)	80	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	80	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	80	°C	UL 746B
PHYSICAL			
Density	1.33	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.06	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.18	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.39	%	ISO 294
Wear Factor Washer	57	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.43	-	ASTM D 3702 Modified: Manual
Static COF	0.36	-	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.11	%	ISO 62
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101345230	-	-
UL Recognized, 94V-0 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating	≥0.8	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥0.4	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	255 – 290	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	255 – 265	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	40 – 65	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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