LNP™ LUBRICOMP™ COMPOUND KA000M

LUBRICOMP-KA

DESCRIPTION

LNP LUBRICOMP KA000M is a compound based on Acetal Copolymer resin containg Aramide and Proprietary Lubricant. Added features include Internally Lubricated.

INDUSTRY	SUB INDUSTRY
Building and Construction	Outdoor, Lawn and Landscape
Consumer	Commercial Appliance
Electrical and Electronics	Electrical Devices and Displays

TYPICAL PROPERTY VALUES

Revision 20191223

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Modulus, 5 mm/min	2600	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	6	%	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	42	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2600	MPa	ASTM D 790
Flexural Strength, 1.3 mm/min, 50 mm span	74	MPa	ASTM D 790
Flexural Modulus, 2 mm/min	2400	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	1400	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	800	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7	%	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	7	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	7	%	ISO 178
Flexural Stress, yield, 2 mm/min	70	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	42	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	22	MPa	ISO 178
Tensile Modulus, 1 mm/min	2600	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	6	%	ISO 527
Tensile Strain, break, 5 mm/min	7.8	%	ISO 527
Tensile Stress, yield, 5 mm/min	42	MPa	ISO 527
IMPACT			
Izod Impact, notched, 23°C	28	J/m	ASTM D 256
Izod Impact, unnotched, 23°C	310	J/m	ASTM D 4812
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	2	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	30	kJ/m²	ISO 179/1eU
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	96	°C	ASTM D 648

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temp, Rate B/50	143	°C	ASTM D 1525
CTE, 23°C to 60°C, flow	1.2E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.3E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	150	°C	ISO 75/Bf
Vicat Softening Temp, Rate B/120	144	°C	ISO 306
Vicat Softening Temp, Rate B/50	143	°C	ISO 306
PHYSICAL			
Moisture Absorption, 50% RH, 24 hrs	0.2 – 0.3	%	ASTM D 570
Water Absorption, 24 hours	0.2 – 0.4	%	ASTM D 570
Dynamic COF	0.2	-	ASTM D 3702 Modified: Manual
Static COF	0.22	-	ASTM D 3702 Modified: Manual
Wear Factor Washer	9	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Moisture Absorption (23°C / 50% RH)	0.2 – 0.3	%	ISO 62
Water Absorption, 23°C/24hrs	0.2 – 0.4	%	ISO 62-1
Melt Volume Rate, MVR at 190°C/2.16 kg	4 – 6	cm³/10 min	ISO 1133
Density	1.35	g/cm³	ISO 1183
Mold Shrinkage, flow	1.5 – 2.5	%	SABIC method
Mold Shrinkage, xflow	1.5 – 2.5	%	SABIC method
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E45329-101343833	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	200 – 215	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Mold Temperature	80 – 110	°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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