LNP™ LUBRICOMP™ COMPOUND FL003

FL-4030

DESCRIPTION

LNP* LUBRICOMP* FL003 is a compound based on Polyethylene resin containing 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191211

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	24	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	14	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	8.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	59	%	ASTM D 638
Tensile Modulus, 50 mm/min	1480	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	850	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	24	MPa	ISO 527
Tensile Stress, break, 5 mm/min	12	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	8.4	%	ISO 527
Tensile Strain, break, 5 mm/min	237	%	ISO 527
Tensile Modulus, 1 mm/min	1310	MPa	ISO 527
Flexural Stress	20	MPa	ISO 178
Flexural Modulus, 2 mm/min	920	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1460	J/m	ASTM D 4812
Izod Impact, notched, 23°C	39	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	8	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	94	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	72	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	46	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.34E-04	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.45E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	82	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	46	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.03	-	ASTM D 792
Density	1.03	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.04	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 – 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 – 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	2 – 4	hrs	
Melt Temperature	230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	40 – 55	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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