LNP™ LUBRICOMP™ COMPOUND FP003

FL-4530

DESCRIPTION

LNP LUBRICOMP FP003 compound is based on Polyethylene (PE) resin, containing 15% PTFE/silicone. Added features of this grade include: Internally Lubricated, Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced, PTFE/Silicone
Polymer Types	Polyethylene, Unspecified (PE, Unspecified)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	20	MPa	ISO 527
Tensile Stress, break, 50 mm/min	12	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	9	%	ISO 527
Tensile Strain, break, 50 mm/min	12	%	ISO 527
Tensile Modulus, 1 mm/min	900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	18	MPa	ISO 178
Flexural Modulus, 2 mm/min	700	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	80	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	63	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	47	°C	ISO 75/Af
CTE, 23°C to 60°C, flow	1.24E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.44E-04	1/°C	ISO 11359-2
PHYSICAL [1]			
Density	1.02	g/cm³	ISO 1183
Mold Shrinkage, flow [2]	3	%	SABIC method
INJECTION MOLDING [3]			
Drying Temperature	80	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	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	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER