LNP™ LUBRICOMP™ Compound PFI12R

PFL-4412 MR

DESCRIPTION

LNP LUBRICOMP PFI12R compound is based on Nylon 6 resin containing 10% glass fiber, 2% silicone. Added features of this grade include: Wear Resistant, Mold Release.

GENERAL INFORMATION	
Features	Wear resistant, Enhanced mold release, No PFAS intentionally added
Fillers	Glass Fiber (Total fluorine >50ppm only from inorganic fluorine), Silicone
Polymer Types	Polyamide 6 (Nylon 6)
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, break	105	MPa	ASTM D638
Tensile Strain, break	3.2	%	ASTM D638
Tensile Modulus, 50 mm/min	4950	MPa	ASTM D638
Flexural Stress	151	MPa	ASTM D790
Flexural Modulus	5250	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	713	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	202	°C	ASTM D648
PHYSICAL [1]			
Density	1.19	g/cm³	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	0.5	%	ASTM D955
INJECTION MOLDING [3]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	265 – 275	°C	
Front - Zone 3 Temperature	275 – 290	°C	
Middle - Zone 2 Temperature	265 – 275	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	80 – 95	°C	
Back Pressure	0.3 – 0.7	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.

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