LNP™ LUBRILOY™ COMPOUND DF204

DF-20

DESCRIPTION

LNP LUBRILOY DF204 compound is based on Polycarbonate (PC) resin containing 20% glass fiber and a proprietary lubricant. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polycarbonate (PC)
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 20240122

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, break	105	MPa	ASTM D638
Tensile Strain, break	2.8	%	ASTM D638
Tensile Modulus, 50 mm/min	6750	MPa	ASTM D638
Flexural Stress	158	MPa	ASTM D790
Flexural Modulus	5990	MPa	ASTM D790
IMPACT [1]			
Izod Impact, unnotched, 23°C	758	J/m	ASTM D4812
Izod Impact, notched, 23°C	181	J/m	ASTM D256
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	137	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.38E-05	1/°C	ASTM E831
Thermal Conductivity	0.25	W/m-°C	ASTM E1530
PHYSICAL [1]			
Density	1.32	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.2 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.2 – 0.3	%	ASTM D955
Wear Factor Washer	179	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dynamic COF	0.41	-	ASTM D3702 Modified: Manual
Static COF	0.39	-	ASTM D3702 Modified: Manual
FLAME CHARACTERISTICS			
Glow Wire Ignitability Temperature, 1.0 mm	800	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	800	°C	IEC 60695-2-13
Glow Wire Flammability Index, 1.0 mm	775	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	800	°C	IEC 60695-2-12
INJECTION MOLDING [3]			
Drying Temperature	100	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	290 – 315	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Middle - Zone 2 Temperature	280 – 300	°C	
Rear - Zone 1 Temperature	275 – 300	°C	
Mold Temperature	65 – 95	°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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

DISCLAIMER