LNP™ LUBRICOMP™ COMPOUND CZL36

PDX-C-01818

DESCRIPTION

LNP LUBRICOMP CZL36 compound is based on Polystyrene (PS) resin containing 30% milled glass and 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Milled Glass Fiber, PTFE
Polymer Types	Polystyrene (PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Building and Construction	Building Component, Water Management
Consumer	Sport/Leisure
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	24	MPa	ASTM D638
Tensile Stress, break	24	MPa	ASTM D638
Tensile Strain, yield	1.7	%	ASTM D638
Tensile Strain, break	2.3	%	ASTM D638
Tensile Modulus, 50 mm/min	2550	MPa	ASTM D638
Flexural Stress	52	MPa	ASTM D790
Flexural Modulus	4890	MPa	ASTM D790
Tensile Stress, yield	22	MPa	ISO 527
Tensile Stress, break	21	MPa	ISO 527
Tensile Strain, yield	1.6	%	ISO 527
Tensile Strain, break	3.5	%	ISO 527
Tensile Modulus, 1 mm/min	3880	MPa	ISO 527
Flexural Stress	49	MPa	ISO 178
Flexural Modulus	5110	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	117	J/m	ASTM D4812
Izod Impact, notched, 23°C	26	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	2	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	7	kJ/m²	ISO 180/1U

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 +23°C	2	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	83	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.49E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.74E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	6.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.75E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	83	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.52	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.03	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [2]	0.2 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.3 – 0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	0.24 – 0.26	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.31 – 0.37	%	ISO 294
Density	1.52	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.09	%	ISO 62
INJECTION MOLDING [3]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	250	°C	
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	40 – 65	°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.

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