



LNP™ LUBRICOMP™ Compound ABL12

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound ABL-4012

Product reorder name: ABL12

LNP* LUBRICOMP* ABL12 is a compound based on Acrylonitrile Butadiene Styrene resin containing 10% Glass Bead and 5% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	330	kgf/cm ²	ASTM D 638
Tensile Stress, break	320	kgf/cm ²	ASTM D 638
Tensile Strain, break	15	%	ASTM D 638
Tensile Modulus, 50 mm/min	26300	kgf/cm ²	ASTM D 638
Flexural Stress	630	kgf/cm ²	ASTM D 790
Flexural Modulus	24300	kgf/cm ²	ASTM D 790
Tensile Stress, yield	32	MPa	ISO 527
Tensile Stress, break	31	MPa	ISO 527
Tensile Strain, break	28	%	ISO 527
Tensile Modulus, 1 mm/min	2280	MPa	ISO 527
Flexural Stress	59	MPa	ISO 178
Flexural Modulus	2280	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	57	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	80	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	88	°C	ISO 75/Af
PHYSICAL			
Density	1.14	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1	%	ASTM D 955

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) 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.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.



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PHYSICAL			
Mold Shrinkage, xflow, 24 hrs (5)	0.2	%	ASTM D 955
Wear Factor Washer	125	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.39	-	ASTM D 3702 Modified: Manual
Static COF	0.44	-	ASTM D 3702 Modified: Manual

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Source GMD, last updated:



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05 - 0.1	%
Melt Temperature	260	°C
Front - Zone 3 Temperature	265 - 275	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	205 - 215	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

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