

# LNP<sup>™</sup> STAT-LOY<sup>™</sup> Compound AF306

#### Americas: COMMERCIAL

Also known as: LNP™ STAT-LOY™ Compound AF-30 Product reorder name: AF306

LNPTM STAT-LOYTM AF306 is a compound based on ABS resin containing 30% Glass Fiber. Added feature of this material is: Antistatic.

YPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	390	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, break	390	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yield	1	%	ASTM D 638
Tensile Strain, break	1	%	ASTM D 638
Tensile Modulus, 50 mm/min	70300	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress	490	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus	56200	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield	43	MPa	ISO 527
Tensile Stress, break	43	MPa	ISO 527
Tensile Strain, yield	1.1	%	ISO 527
Tensile Strain, break	1	%	ISO 527
Tensile Modulus, 1 mm/min	6010	MPa	ISO 527
Flexural Stress	63	MPa	ISO 178
Flexural Modulus	5700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	25	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	70	cm-kqf	ASTM D 3763
Multiaxial Impact	17	cm-kqf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	17	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	102	°C	ASTM D 648

(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 surgate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

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## Americas: COMMERCIAL

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	95	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.13E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.32E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.14E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	71	°C	ISO 75/Af
PHYSICAL			
Density	1.29	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.45	%	ISO 294
Density	1.28	g/cm³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+10 - 1.E+12	Ohm	ASTM D 257

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#### Source GMD, last updated:

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	70 - 80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05 - 0.1	%
Melt Temperature	200 - 210	°C
Front - Zone 3 Temperature	205 - 215	°C
Middle - Zone 2 Temperature	195 - 205	°C
Rear - Zone 1 Temperature	180 - 195	°C
Mold Temperature	10 - 50	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

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