# LNP\* Stat-loy\* Compound A3000

# **Americas: COMMERCIAL**

#### Also known as: A Product Reorder Name: A3000

LNP STAT-LOY\* A3000 is a compound based on Acrylonitrile Butadiene Styrene resin containing Anti-Static. Added features of this material include: Antistat.

# Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	39	MPa	ASTM D 638
Tensile Stress, break	36	MPa	ASTM D 638
Tensile Strain, yield	3.1	%	ASTM D 638
Tensile Strain, break	6	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Flexural Stress	65	MPa	ASTM D 790
Flexural Modulus	2090	MPa	ASTM D 790
Tensile Stress, yield	38	MPa	ISO 527
Tensile Stress, break	31	MPa	ISO 527
Tensile Strain, yield	3	%	ISO 527
Tensile Strain, break	24.2	%	ISO 527
Tensile Modulus, 1 mm/min	2010	MPa	ISO 527
Flexural Stress	59	MPa	ISO 178
Flexural Modulus	1980	MPa	ISO 178
ІМРАСТ	Value	Unit	Standard
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	282	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	32	J	ASTM D 3763
Multiaxial Impact	26	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	88	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.34E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.01E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.34E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.01E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	91	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	76	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.065	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	1.08	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.41	%	ISO 294



Mold Shrinkage, xflow, 24 hrs	0.49	%	ISO 294
Density	1.06	g/cm <sup>3</sup>	ISO 1183
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+09 - 1.E+11	Ohm	ASTM D 257
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by GE

Source GMD, last updated:10/01/2004

### Processing

Parameter		
Injection Molding	Value	Unit
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

Source GMD, last updated:10/01/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(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.

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