

LNP* Stat-loy* Compound AF306

Asia Pacific: COMMERCIAL

Also known as: AF-30
Product Reorder Name: AF306

LNP* Stat-loy* AF306 is a compound based on Acrylonitrile Butadiene Styrene resin containing Glass Fiber. Added features of this material include: Antistat.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yield	38	MPa	ASTM D 638
Tensile Stress, break	38	MPa	ASTM D 638
Tensile Strain, yield	1	%	ASTM D 638
Tensile Strain, break	1	%	ASTM D 638
Tensile Modulus, 50 mm/min	6890	MPa	ASTM D 638
Flexural Stress	48	MPa	ASTM D 790
Flexural Modulus	5510	MPa	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	250	J/m	ASTM D 4812
Izod Impact, notched, 23°C	48	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	17	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	102	°C	ASTM D 648
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/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.3	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	0.45	%	ISO 294
Density	1.28	g/cm ³	ISO 1183
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+06 - 1.E+09	Ohm	ASTM D 257

Source GMD, last updated:09/24/2008

Processing

Parameter	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

Source GMD, last updated:09/24/2008

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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