



LNP™ STAT-LOY™ Compound AF3009

Americas: COMMERCIAL

Also known as: LNP™ STAT-LOY™ Compound AF-FR

Product reorder name: AF3009

LNP STAT-LOY AF3009 is a compound based on ABS resin containing 10% Glass Fiber. Added features of this material include: Antistatic, Flame Retardant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	420	kgf/cm ²	ASTM D 638
Tensile Stress, break	420	kgf/cm ²	ASTM D 638
Tensile Strain, yield	1.8	%	ASTM D 638
Tensile Strain, break	1.9	%	ASTM D 638
Tensile Modulus, 50 mm/min	42100	kgf/cm ²	ASTM D 638
Flexural Stress	560	kgf/cm ²	ASTM D 790
Flexural Modulus	35100	kgf/cm ²	ASTM D 790
Tensile Stress, yield	43	MPa	ISO 527
Tensile Stress, break	42	MPa	ISO 527
Tensile Strain, yield	1.8	%	ISO 527
Tensile Strain, break	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	3620	MPa	ISO 527
Flexural Stress	61	MPa	ISO 178
Flexural Modulus	3200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	22	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	48	cm-kgf	ASTM D 3763
Multiaxial Impact	16	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	96	°C	ASTM D 648





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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.36E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.12E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.2E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Af
PHYSICAL			
Density	1.31	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.8 - 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9 - 1.1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.93	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1	%	ISO 294
Density	1.31	g/cm ³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+10 - 1.E+12	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP





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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

