

LNPTM STAT-LOYTM COMPOUND 9X03508

EXCP0218

DESCRIPTION

LNP STAT-LOY 9X03508 compound is based on Polyphenylene Ether (PPE) / Nylon 6/6 blend containing proprietary fillers and glass fiber. Added features of this grade include: Permanently Anti-Static, Flame Retardant, High Impact.

GENERAL INFORMATION	
Features	Flame Retardant, Antistatic, Impact resistant
Fillers	Glass Fiber
Polymer Types	Polyphenylene Ether + PA (PPE+Nylon)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL (1)			
Tensile Stress, yield	53	MPa	ASTM D638
Tensile Stress, break	53	MPa	ASTM D638
Tensile Strain, yield	2.1	%	ASTM D638
Tensile Strain, break	2.2	%	ASTM D638
Tensile Modulus, 50 mm/min	4820	MPa	ASTM D638
Flexural Stress	82	MPa	ASTM D790
Flexural Modulus	3440	MPa	ASTM D790
Tensile Stress, yield	59	MPa	ISO 527
Tensile Stress, break	58	MPa	ISO 527
Tensile Strain, yield	2.4	%	ISO 527
Tensile Strain, break	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	4470	MPa	ISO 527
Flexural Stress	96	MPa	ISO 178
Flexural Modulus	4000	MPa	ISO 178
IMPACT (1)			
Izod Impact, unnotched, 23°C	427	J/m	ASTM D4812
Izod Impact, notched, 23°C	37	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	8	J	ASTM D3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL (1)			



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	230	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	186	°C	ASTM D648
CTE, -40°C to 40°C, flow	4.32E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.48E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	4.30E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.50E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	218	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	179	°C	ISO 75/Af
PHYSICAL (1)			
Density	1.31	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.9	%	ASTM D570
Density	1.31	g/cm³	ISO 1183
ELECTRICAL (1)			
Surface Resistivity (2)	1.E+10 – 1.E+12	Ω	ASTM D257
Juliace Resistivity	1.6710 - 1.6712	12	ASTIVI DZST
FLAME CHARACTERISTICS (3)	1.6710 - 1.6712	77	ASTNI DEST
	E121562-101284110	-	-
FLAME CHARACTERISTICS (3)		- mm	- UL 94
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link	E121562-101284110		
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating	E121562-101284110		
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾	<u>E121562-101284110</u> 2.4	- mm	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature	E121562-101284110 2.4	- mm	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time	E121562-101284110 2.4 80 4	- mm °C Hrs	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time Maximum Moisture Content	E121562-101284110 2.4 80 4 0.02	- mm °C Hrs	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time Maximum Moisture Content Melt Temperature	E121562-101284110 2.4 80 4 0.02 200 - 230	- mm °C Hrs %	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time Maximum Moisture Content Melt Temperature Front - Zone 3 Temperature	E121562-101284110 2.4 80 4 0.02 200 – 230 220 – 230	- mm °C Hrs % °C	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time Maximum Moisture Content Melt Temperature Front - Zone 3 Temperature Middle - Zone 2 Temperature	E121562-101284110 2.4 80 4 0.02 200 - 230 220 - 230 210 - 220	- mm °C Hrs % °C °C °C	
FLAME CHARACTERISTICS ⁽³⁾ UL Yellow Card Link UL Recognized, 94V-1 Flame Class Rating INJECTION MOLDING ⁽⁴⁾ Drying Temperature Drying Time Maximum Moisture Content Melt Temperature Front - Zone 3 Temperature Middle - Zone 2 Temperature Rear - Zone 1 Temperature	E121562-101284110 2.4 80 4 0.02 200 - 230 220 - 230 210 - 220 200 - 210	- mm °C Hrs % °C °C °C °C	

⁽¹⁾ The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

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⁽²⁾ Measurement meets requirements as specified in ASTM D4496.

⁽³⁾ UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

⁽⁴⁾ Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.