

# LNPTM STAT-LOY™ COMPOUND YX02589C

PDX-Y-02589 CCS

## DESCRIPTION

LNP STAT-LOY YX02589C compound is based on Polyester Elastomer resin containing proprietary fillers. Added features of this grade include: Permanently Anti-Static, LNP Clean Compounding Technology.

GENERAL INFORMATION	
Features	Antistatic, Low ionics/Outgassing/Liquid particle count, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Thermoplastic Polyester Elastomer (TPEE)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yld, Type I, 5 mm/min	6	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	71.4	%	ASTM D638
Tensile Modulus, 5 mm/min	30	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	40	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	6	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	161.7	%	ISO 527
Tensile Modulus, 1 mm/min	40	MPa	ISO 527
Flexural Stress	2	MPa	ISO 178
Flexural Modulus, 2 mm/min	40	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Multiaxial Impact	25	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	18	J	ASTM D3763
<b>THERMAL <sup>(1)</sup></b>			
CTE, -30°C to 30°C, flow	2.45E-04	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	2.89E-04	1/°C	ASTM D696
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.08	-	ASTM D792
Density	1.086	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	5.5	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.61	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.65	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	8.5	%	ISO 62

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(3)</sup>	1.E+10 – 1.E+13	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	215 – 240	°C	
Front - Zone 3 Temperature	225 – 240	°C	
Middle - Zone 2 Temperature	205 – 215	°C	
Rear - Zone 1 Temperature	180 – 195	°C	
Mold Temperature	25 – 55	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

- (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.
- (2) 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 surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Measurement meets requirements as specified in ASTM D4496.
- (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.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.