

# STATEX™ STATIC DISSIPATIVE MATERIAL

# PROVIDES EFFECTIVE, RELIABLE PROTECTION OF SENSITIVE ELECTRONICS

Statex<sup>™</sup> is a resilient static dissipative material that serves as an electrical barrier to both insulate and protect from electrostatic discharge. Constructed from durable Formex<sup>™</sup> polypropylene, this proprietary formula offers exceptional dielectric strength, moisture resistance and dimensional stability, while meeting strict safety and environmental standards.

Statex $^{\text{M}}$  is a superior electrical barrier because it does not generate static like other competing electrical insulation materials. If Statex $^{\text{M}}$  comes in contact with a static electrical charge, it safely dissipates the charge across the surface of the material to a ground.

COLOR:	NATURAL*	NATURAL*	NATURAL*
THICKNESS-INCH	.010 (+.003,0015)	.018 (+.004,002)	.031 (+.004,000)
THICKNESS-MILLIMETER	.25 (+.08,04)	.46 (+.10,05)	.79 (+.10,00)

<sup>\*</sup>Product is line-marked on treated side with carbonless black ink.

	TEST MET	HOD	STATI	EX-10	STAT	EX-18	STATEX-31
TENSILE YIELD - PSI	ASTM D-88	32					
MACHINE DIRECTION			4800		4800	4	1800
TRANSVERSE DIRECTION		3600		3600		3600	
		TEST MET	HOD	STATEX-1	0 9	STATEX-18	STATEX-31
DENSITY - GM/CC		ASTM D-79	92	0.988	(	0.988	0.988
FLAMMABILITY		UL 94		VTM-0	١	V-0	V-0
OXYGEN INDEX		ASTM D-28	363	28	2	28	28
WATER ABSORPTION - % CHANGE IN	WEIGHT	ASTM D-57	70	0.01%	(	0.01%	0.01%
HEAT DEFLECTION TEMPERATURE AT	66 PSI	ASTM D-64	18	106°C/223	8°F	106°C/223°F	106°C/223°F
RELATIVE THERMAL INDEX		UL 746B					
ELECTRICAL				95°C/203°	F 1	100°C/212°F	110°C/230°F
MECHANICAL WITHOUT IMPACT				95°C/203°	F :	100°C/212°F	110°C/230°F



#### TEST METHOD STATEX-10 STATEX-18 STATEX-31

STATIC DECAY - SECONDS (FEDERAL TEST METHOD 101C)	ASTM D-257	<2	<2	<2
SURFACE RESISTIVITY - OHMS/SQUARE	ASTM D-257	10 <sup>9</sup> TO 10 <sup>11</sup>	109 TO 1011	10 <sup>9</sup> TO 10 <sup>11</sup>
DIELECTRIC BREAKDOWN - VOLTS	ASTM D-149	17,500	27,540	37,200
DIELECTRIC STRENGTH - VOLTS/MIL	ASTM D-149	1750	1530	1200
VOLUME RESISTIVITY - OHM-CM	ASTM D-257	146X10 <sup>15</sup>	146X10 <sup>15</sup>	146X10 <sup>15</sup>
DIELECTRIC CONSTANT	ASTM D-150	2.30	2.30	2.30
DISSIPATION FACTOR	ASTM D-150	0.0009	0.0009	0.0009
HIGH CURRENT ARC IGNITION - ARCS TO IGNITE	UL 746A	113	23	195
HIGH VOLTAGE ARC TRACKING - IN/MIN	UL 746A	0.0	0.0	0.0
HOT WIRE IGNITION - SECONDS	UL 746A	6+	11	21
COMPARATIVE TRACKING INDEX - VOLTS	ASTM D-3638	600+	600+	600+

## RELIABLE CIRCUIT BOARD PROTECTION

Stationary electric charge commonly builds up on humans or objects, including pieces of electronics. If an electrically charged material comes near unprotected electronic equipment, it can discharge the current through circuit pathways and significantly harm sensitive electronic components, especially integrated circuits. In fact, as little as 10 volts of static electricity can cause permanent damage.

Computer manufacturers often use static dissipative materials to insulate and protect their circuit boards. As a highly effective electrical barrier and static dissipative material, Statex™ is an ideal product for design engineers to use to keep circuit boards from developing static electricity between each other and from experiencing electrostatic shock from outside sources.

### LONG-LASTING STATIC DISSIPATION IN ANY ENVIRONMENT

Statex<sup>™</sup> is specially formulated to function without the presence of humidity and has been proven to maintain its static dissipative properties over time. This means that Statex<sup>™</sup> provides effective, enduring electrostatic discharge protection in any climate for the life of your product.

## PRODUCT ORDERING INFORMATION AND TECHNICAL DETAILS

Our experienced engineers can help you design your Statex<sup>™</sup> static dissipative material into a wide variety of shapes to meet your unique flammability and dielectric requirements. Statex<sup>™</sup> is available in natural (white) rolls and is line-marked to indicate the dissipative side. It is can be ordered in the following three standard sizes::

- · Statex-10: 0.010 inches (0.25 mm) thick
- Statex-18: 0.018 inches (0.46 mm) thick
- · Statex-31: 0.031 inches (0.79 mm) thick

### **Product Features**

- · UL 94V-0 Flame Class Rating
- · Non-hygroscopic (moisture absorption <0.1%)
- · Excellent dielectric strength
- Superior score and fold ability
- · Economical