



# z-flo® Product Guide Conductive Films

Manufacturers around the world trust Transcontinental Advanced Coatings to deliver high-performance conductive films. Lightweight, low-cost and high performing, our carbon-filled polymeric films, with or without additional silver coatings, exhibit high conductivity, will not flake and are unaffected by humidity. All **z-flo**® products provide 'through' conductivity in the z-direction.

The precise coating, uniform surface conductivity, and 'through conductivity' make our films ideal for use in a variety of compact and lightweight medical diagnostics and treatment devices. Applications include muscle stimulation, patient monitoring, defibrillation, transdermal drug delivery and use in other diagnostic devices where **z-direction conductivity** is required.

#### **Conductive Films for Stimulator Electrodes:**

Vinyl and silver coated vinyl. Conductive films for Transcutaneous Electrical Nerve Stimulation (TENS) and Neuromuscular Electrical Stimulation (NMES) for back pain, strains, and muscle pull.

### **Conductive Films for Monitoring Electrodes:**

Vinyl and silver-coated vinyl. Conductive films for EKG, EEG and other medical monitoring vinyl.

#### **Conductive Films for Defibrillator Electrodes:**

Silver/silver chloride coated vinyl. Conductive films used for life-threatening cardiac dysrhythmia.

#### **Conductive Films for Iontophoresis Electrodes:**

Vinyl and silver-coated vinyl. Conductive films for use in transdermal drug delivery applications such as used by physical therapists for the application of anti-inflammatory medications.

CONDUCTIVE VINYL								
Product Ref	Structure	Sides Coated	Total Caliper mils (μm)	Resistivity at 24°C (ohms/sq)	Basis Weight (g/m²)	Tensile Strength	Shelf Life (years)	
1150	Conductive Carbon / Vinyl Film	N/A	1.60 (41)	<120	19.2	>5	1	
1153	Conductive Carbon / Vinyl Film	N/A	1.75 (44)	<120	22	>5	1	
2267	Conductive Carbon / Vinyl Film	N/A	2.35 (60)	<75	74.9	>6	1	
2252	Conductive Carbon / Vinyl Film	N/A	4.0 (102)	<50	127.5	>12	1	



SILVER COATED CONDUCTIVE VINYL SUBSTRATE								
Product Ref	Structure	Sides Coated	Total Caliper mils (µm)	Resistivity at 24°C (ohms/sq)	Basis Weight (g/m²)	Shelf Life (years)		
4204	Product 2267 + Silver	1	2.5 (64)	<2.0	83.7	1		
4206	Product 2267 + Silver	1	2.4 (61)	<4.0	77.5	1		
4401	Product 2252 + Silver	1	4.2 (107)	<4.0	138.7	1		
4402	Product 2252 + Silver	1	4.1 (104)	<2.0	136.3	1		

SILVER with SILVER / SILVER CHLORIDE COATED VINYL SUBSTRATE								
Product Ref	Structure	Sides Coated	Total Caliper mils (μm)	Resistivity at 24°C (ohms/sq)	Basis Weight (g/m²)	Shelf Life (years)		
6355	Product 2267 + Silver + Silver / Silver Chloride	1	2.6 (66)	<10	84.9	1		
6404	Product 2252 + Silver + Silver / Silver Chloride	1	4.2 (107)	<10	137.5	1		

SILVER / SILVER CHLORIDE COATED CONDUCTIVE VINYL SUBSTRATE							
Product Ref	Structure	Sides Coated	Total Caliper mils (μm)	Resistivity at 24°C (ohms/sq)	Basis Weight (g/m²)	Shelf Life (years)	
8201	Product 2267 + Silver / Silver Chloride	1	2.4 (61)	<10	79.3	1	
8403	Product 2252 + Silver / Silver Chloride	1	4.1 (104)	<10	131.9	1	

SILVER SIDE "A" - SILVER / SILVER CHLORIDE SIDE "B"								
Product Ref	Structure	Sides Coated	Total Caliper mils (μm)	Resistivity at 24°C (ohms/sq)	Basis Weight (g/m²)	Shelf Life (years)		
7403*	Conductive Vinyl Substrate	2	4.3 (109)	<2	135	1		

<sup>\*7403</sup> is coated on both sides and does not contain release paper.

Although every effort has been made to supply reliable data, the values are for guidance purposes only and do not constitute a specification. It is recommended to measure samples to determine the suitability of the material for end product use.

UPDATED: September 2018

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