

ATP901 Washable conductive fabric & Smart Textile

Product Description

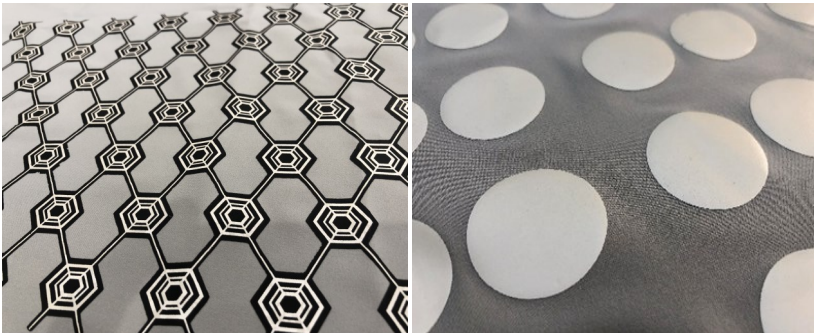
ATP901 Series conductive silver resin designed to produce printed electronic circuits on washable textiles. It can withstand standard machine washing and heating drying cycles. ATP901 conductive silver resin can be applied to different fabrics, providing new possibilities for smart textiles and facilities for many wearable printed electronic applications. ATP901 conductive Silver resin can be printed on PET Film by screen printing, and then transfer to synthetic fabrics. The textile become to washable.

Thermal transfer process. It does not require a dielectric package to ensure washability. These products are very flexible, wrinkle resistant, and have excellent adhesion to a variety of substrates. Applications include wearable electrodes, textile electrodes, biosensors, pressure sensors, heart rate monitoring, antennas, Actuator, and more.

Product Features

Soft, non-wearing, and physiological sensing are smart textiles needs.

Smart textiles need to be highly conductive to transmit physiological signals to the sensor elements, and their electrical conductivity comes from conductive textiles.



ATP901 conductive silver resin can be printed on synthetic fiber fabric by screen printing or thermal transfer printing method.

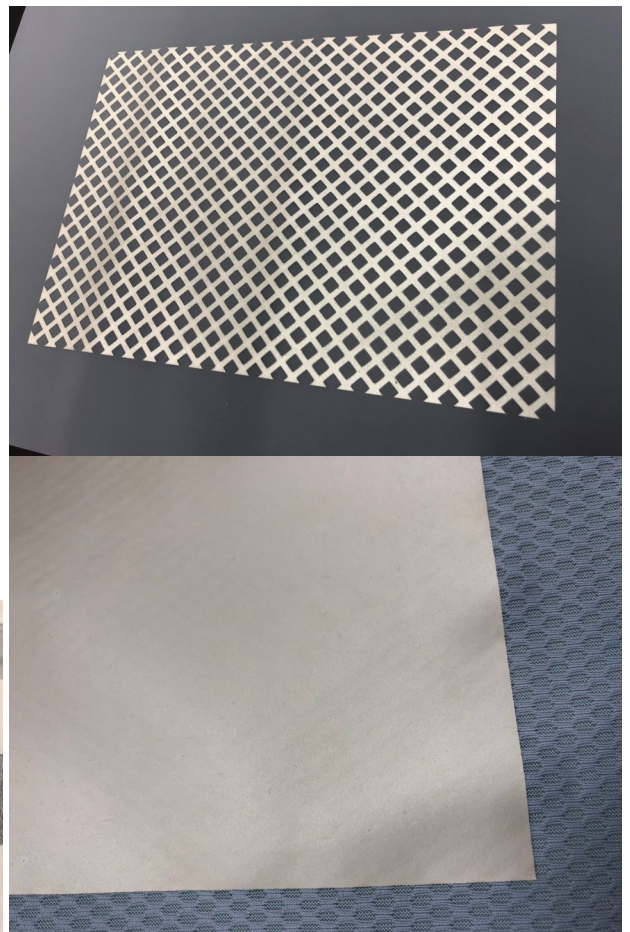


The left picture is the test sample.

Applications include wearable electrodes, textile electrodes, biosensors, pressure sensors, heart rate monitoring, antennas, Actuator, and more. Can be Washable and dry cleaning.

Product Benefits

- Washable and dry cleaning
- Combine textiles with electronic functions
- Improve data precision
- Increase wear comfort
- The diversity of measurement functions.
- Provide personalized, flexible and humanized smart textiles.
- Skin protection and beautiful appearance



ATP901 conductive silver resin can be screen printed or thermally transferred printed to the various color and pattern. If customers need.

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<u>Properties</u>			
Material	The fast-drying silver resin forms a thin, highly conductive and flexible paint layer		
Appearance	Light gray, thick liquid.		
Gloss	Gray		
Binder	PU resin		
Solid contain	65~75 %		
Thinning agent	water		
Specific gravity	2.3 g/ml		
Viscosity cp (25℃)	40000 ~ 50000		
The storage stability	Can store below 28℃ 6 months		
Curing conditions	120℃ , 30 mins		
Thickness	≥ 40μm		
Standard Size	500 x 500mm / Sheet		
Adhesion	Excellent		
Volume resistivity	≤ 10 ⁻³ Ω-cm		
Abrasion Test	Test Before	3000RPM After	6000RPM After
Surface Resistance (Ω/□)	0.08Ω	0.15Ω	0.27Ω
Impedance (dB)	25 dB	24 dB	22 dB
Washed 50 times (AATCC 135)	Before		After
Surface Resistance (Ω)	1.53Ω		4.95Ω
Washing color fastness (AATCC-61-2A)	Level 4~5		
Perspiration color fastness (AATCC 15-2009)	Level 4~5		
Skin irritation test (ISO 10993-10)	PII=0		
Skin sensitivity test (ISO 10993-10)	No allergies situation		
RoHS Compliant; Abrasion Test (ASTM 4966 Standard Test 3000 RPM and 6000 RPM)			
The above data is actual test value, not absolute value.			