

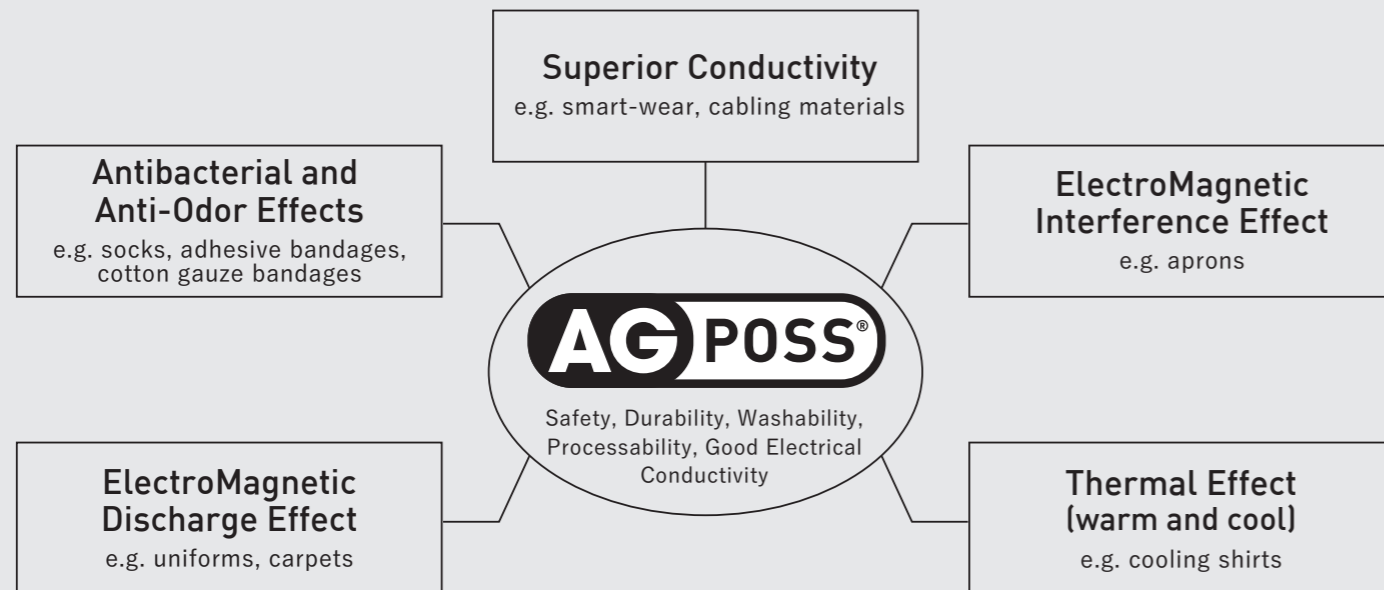
Metal that has a face of yarns



What is AGPOSS®?

AGPOSS® is a silver-metalized fiber on the surface of nylon. AGPOSS® is entirely covered with "silver" on its surface. It is like threads and not like threads, like metal and not like metal. It is, so to speak, "metal that has a face of yarns". Unlike conventional silver-conjugated fiber and film-like silver yarn, its conductivity is superior due to the large amount of silver. Therefore, it is excellent for ElectroMagnetic Interference, Antibacterial Effect, Anti-Odor, Thermal Effect, Insulation and ElectroMagnetic Discharge.

What can AGPOSS® do?



Safety of Material

Primary skin irritation test (Japan Food Research Laboratories)	free from irritating properties	non-reactive
Acute oral toxicity test (Japan Food Research Laboratories)	>2000mg/kg	no death rate
Patch test (Japanese Society for Cutaneous Health)	almost negative	—

Based on hospital monitors' report on health damages related to household products conducted by Ministry of Health, Labour and Welfare, silver was proved to be the least susceptible to skin in a survey of metallic products.

Products

Product lines for AGPOSS® are filaments, spun yarns, cut fibers, twisted yarns, woven fabrics and nonwoven fabrics. It retains a soft texture of fibers unlike metallic thin wires and film fibers so that it is possible to process into woven or knitted fabrics. Also, cut fibers can be put in resin and adhesive. The adhesion of yarns to silver is strong, and silver plating does not peel off easily.

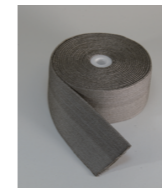


AGPOSS® Silver-Metalized Fiber (Filament)

Possesses the highest electrical resistance among all conductive fibers, yet maintains a texture of fibers and washability. It can be used for wearable sensors, electrodes, materials for ElectroMagnetic interference, RFID antennas and others.

Property	Denier	Actual Denier	Ω/cm	Strength (g)	Elongation (%)
	30d/10f	approx. 40d	<20	138	27.9
	70d/24f	approx. 100d	<10	396	29.3
	100d/34f	approx. 140d	<5	512	35

Note: Above figures are not guaranteed performance.



Conductive Wearable Electrode Knitted Tape

Flexible knit tapes made from 100% silver-metalized conductive fibers. It can be used as a wearable electrode or conductive lead wires.

Property	Width	Weight(g/m)	Ω/cm	Strength (N)	Thickness (mm)
	10mm	2.5	0.25	100	0.5
	20mm	5	0.15	180	0.5
	50mm	12.5	0.05	470	0.5

Note: Above figures are not guaranteed performance.

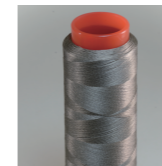


Conductive Coated Wires AGPOSS®T1, T1Z for Wearable

Lead wires for wearables with a polyester coating of 12-micron thickness on AGPOSS®. It maintains a flexibility unique to fibers. Shielded AGPOSS®T1Z that prevents external radio wave interference is also available.

Specification	Product Name	Substrate	External Diameter	Resistivity (Ω/10cm)
	AGPOSST1 1003	silver-metalized nylon	280μm	20
	AGPOSST1 10033	silver-metalized nylon	530μm	5

Note: Above figures are not guaranteed performance, and specification is subject to change without notice.



Silver-Metalized Fiber, Conductive Machine-Sewing Thread

Just as Filament above, it can be used widely as a joint to conductive parts and wearable wiring.



Conductive Wearable Knit Fabric

Flexible knit fabrics made with silver-metalized conductive fiber. It can be used as a wearable electrode and sheets.



Silver-Metalized Fiber-Spun Yarn

By mixing silver with cotton or PET as conductive fibers, a texture is close to original fibers, and not only features antibacterial, ElectroMagnetic discharge but also conductivity, antibacterial and anti-odor.



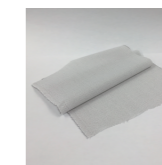
Silver-Metalized Cut Fiber

Metalized on 0.3mm~3mm cut materials. It can be used for conductive adhesives, paint and stylus pens.



Silver-Metalized Staple

Cut out of filament. It can be used for nonwoven fabrics and spun yarns with features of conductivity and antibacterial effect.



ElectroMagnetic Interference Fabric

Possesses a softness of fiber and washability, yet maintains a conductivity. Its performance is 30dB or more (based on KEC method). Note: It is possible to achieve over 30dB performance depending on structures.



Antibacterial / Conductive / ElectroMagnetic Interference Mesh Fabric

Excellent conductivity and visibility by metalizing silver on nylon mesh. Washable, durable and expected for countermeasures against ElectroMagnetic waves emitted by medical instruments in hospitals.