

URL: www.mogreat.com



Product Name: Silver Nanowires Coating Solution

Product Code: MGT-R2R-X202

## **Product Description:**

Silver nanowires coating solution is the preferred material for manufacturing high-end optical flexible transparent conductive film. Through Slot-die, Micro-garvure R2R ( roll to roll ) and other precision coating processes, this solution forms a conductive film or conductive glass with good electrical conductivity, high transparency, and low haze on the surface of flexible PET or glass substrates ( Surface Resistance<  $100 \,\Omega/\Box$ , Transparency  $\geqslant 91\%$ , Haze  $\leqslant 1.0\%$ ).

## **Product Features:**

1. Water-based and eco-friendly

2. Stronger adhesion on substrates

3. Higher process compatibility

4. Efficient film-forming

## **Product Specifications:**

Model	Parameters (Before Curing )	Measurement Method	Value	Remarks
MGT-R2R-X202  ( Water-based coating solution )	Functional filler	N/A	Silver Nanowires	Over-coating ink specially developed by InnoShines can greatly improve the stability and reliability of the film.      AgNW coating layer
	Solid content (wt%)	Ignition loss Method , theoretical calculation	<1	
	Density (g/ml)	1	0.9-1.0	
	Viscosity (cps)	Brookfield Viscometer	< 50	
	Coating thickness (um)	Thickness controller	20-30	
	Parameters (After Curing)	Measurement Method	Value	
	Sheet resistance (Ω/□)	Four-point probes	10-100	transparency up to 99%,
	Transmittance (%)	WGW-ASTMD1003	≥91	(excluding substrate)
	Haze (%)	WGW-ASTMD1003	≤1.0	
	Adhesion	GBT9286-1998	5B	Customized products
	Hardness (H)	Pencil hardness tester	2-3	- Sastamined products

## Usage and precautions:

Curing conditions	After coating on PET substrate, curing it with 100-120°C at 2-3min.			
Process	(1) The AgNW coating solution will be mixed evenly before use. And ensure it's uniformity.			
	(2) Suggested coating thickness :20 $\sim$ 30microns, It can be adjusted as per the equipment difference. Coating thickness			
	directly affect the film conductivity, transmittance, haze etc.			
	(3) Roll to roll coating (R2R) or slit coating are recommended.			
	(4) Substrate: PET, thickness: 125um; Hard coating film or original film can be used, the Surface tension is more than			
	38 dyne, recommend corona treatment before coating.			
	(5) Stored at room temperature15~25℃, Ultrasonic oscillation is strictly prohibited.			
Clean	When cleaning , Please use ethanol, isopropanol etc.			
Storage	Stored in $15\sim25^\circ\!$			
	temperature, and keep sealed and store in a cool and well ventilated place when you no need it .			
Shelf-life	Within 45 days after delivery.			
Notes	Please shake the coating solution evenly by hands before use. Prohibit to use ultrasonic stirring or mechanical			
	equipment due to the high length-diameter ratio of silver nanowires in the coating solution . The film can be cleaned by			
	dust-free cloth dipped with ethanol . If there is insoluble substance when using it , can be filtered using 200 mesh filter.			

**Applications:** Silver nanowires coating solution can be widely used in solar energy, OLED, flexible and full sizes touch displays; conductive composite materials, smart film or glass, electrode printing ink and other fields.

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Packing sizes: 1L/5L/10L/25L/50L/100L/150L/Customized