

Transparent conductive coating solution

# Denatron Type-P P-400MP

- The 2 components water based solution formulated the conductive polymer(PEDOT/PSS) .
- Specialized formulation for Off-Line coating process trays and films.
- Good adhesivity on usual substrates such as Glass, PET, HIPS, PC, Acryl and other films.

## Liquid properties

Items		Component A	Component B
Appearance		Dark blue	Milky white
Viscosity		15 - 40 mPa·s	5 - 15 mPa·s
pH		5 - 6	*after mix
Solid Content		7.0%	*after mix
Shelf life	@5dC	> 6 months	> 6 months
	@25dC	> 3 months	> 3 months

## Film properties (Coating on PET)

Items	Typical value			
	5 times (4:1:20)	10 times (4:1:45)	15 times (4:1:70)	20 times (4:1:95)
Dilution ratio (A : B : Solvent wt%)	5 times (4:1:20)	10 times (4:1:45)	15 times (4:1:70)	20 times (4:1:95)
Coating thickness μm	5	5	5	5
Denatron Usage g/m <sup>2</sup>	1.0	0.50	0.33	0.25
Sheet resistance Ω/sq.	1E8	5E9	5E9	7E9
Total Transmittance %	> 99			
After 85dC/85%Rh * 1000 hours	no change			
After 85dC * 100 hours	no change			

## Example direction how to coat

- ① Prepare dilution solvent (e.g.50% ethanol\*) in a bottle. \*Pure water : Ethanol = 50 : 50 @weight ratio
- ② Add each component gradually in above solvent with mixing. \*Caution; Don't drip rapidly
- ③ Apply with the specified coating thickness after calculating the target usage of P-400MP.  
\*For example, if you want to apply 0.5g/m<sup>2</sup> of P-400MP and expect above 'Typical value' properties;  
e.g.1; Dilute 10times and apply with 5um(=5g) coating thickness (5/10=0.5)  
e.g.2; Dilute 20times and apply with 10um(=10g) coating thickness (10/20=0.5)
- ④ Dry up over 130dC \* 1 minutes for drying up solvent.  
\* Your dry condition might be not enough because heating capability is depends on oven..  
If the surface still has tackiness, it would be better to dry up higher temp. and longer minutes.



More Information

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