Denatron
Conductive coating materials

Transparent antistatic coating solution

Denatron Type-C C-169PF

- The 2 components water based solution formulated SW-CNT(single wall carbon nanotube) .
- Excellent antistatic durability due to inorganic conductive material not like conductive polymers.
- Good adhesivity on usual substrates such as Glass, PET, PC, Acryl and other films.

Liquid properties

Items		Component A	Component B
Appearance		Black	Milky white
Viscosity		30 - 40 mPa･s	3 - 13 mPa･s
pH		5 – 7	*after mix
Solid Content		4.2%	*after mix
Shelf life	@5dC	> 6 months	> 6 months
	@25dC	> 3 months	> 3 months

Film properties（Coating on PET film）

Items	Ex.1	Ex.2	Ex.3	Ex.4	Ex.5
Mixing ratio (A:B)	A : B = 3 : 2 @weight ratio				
Usage g/㎡	1.00	0.40	0.31	0.24	0.20
Total Transmittance %	＞99				
Initial sheet resistance Ω/sq.	2E6	6E6	3E7	5E7	1E8
Sheet resistance after rubbing test	no change * Non-Woven500g × 20cyc				
Sheet resistance after 85dC/85%Rh *1000 hours	no change				
Sheet resistance after 95dC *1000 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 C-169PF.
*For example, if you want to apply 0.20g/㎡ of C-169PF and expect above 'Ex.5' properties;
e.g.1; Dilute 20times and apply with 4um(=4g) coating thickness (4/20=0.20)
e.g.2; Dilute 10times and apply with 2um(=2g) coating thickness (2/10=0.20)
④ Dry up over 100dC~ * 1~2 minutes for drying up solvent and cross linked.
* 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.

Denatron Special site

More Information

Nagase ChemteX Corporation
Functional Chemicals Department
236 Tatsunocho-nakai Tatsuno, Hyogo, 679-4124
Mail : ncxmail_fcd@ncx.nagase.co.jp TEL:+81-791-63-4528

Nagase ChemteX NAGASE Group