SWeNT® V Series[1] Conductive Inks Datasheet

Single Wall Carbon Nanotube (SWNT) Inks for Conventional Printing

- Products

Product	***Application Method***
VC100	Screen Printing Pad Printing Meyer Rod Coating
VC200	Gravure Coating

- Typical Properties

Property	VC100	VC200
Form	Black Viscous Liquid	
Density (g cm^{-3})	0.75	
Viscosity (mPa.s at 23°C) at shear rate of: 1 sec^{-1} 10 sec^{-1} 100 sec^{-1} 1000 sec^{-1}	 15,100 3,370 1,070 500	 2,470 550 190 100
Surface Tension (dyne cm^{-1})	TBD	
Sheet Resistance	See Chart Below	

[1] This ink is based on V2V™ Technology from Chasm Technologies, Inc. Patents Pending
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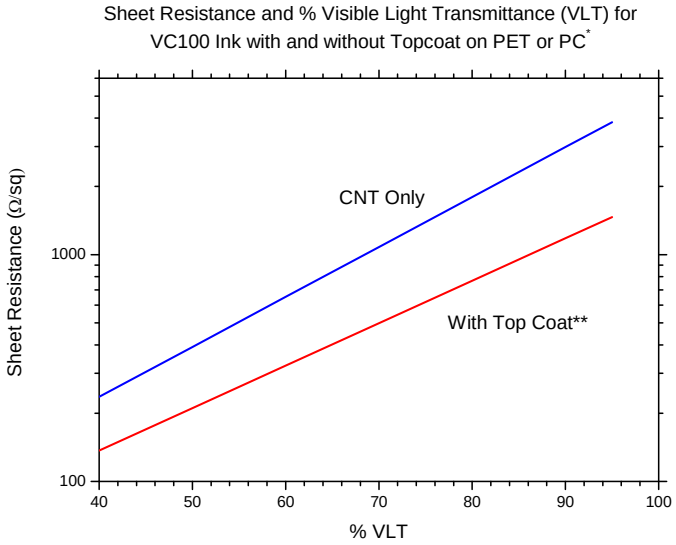

- Recommended Drying Temperature

  The coated film can be dried at oven temperatures as low as 100°C. At this temperature, drying times will be of the order of 2 minutes. Higher temperatures can be used if faster drying times are required.

- Shelf Life and Storage Conditions.

  Full shelf life studies are in progress. Ink should be stored at < 25°C and it is anticipated that after 30 days storage re-mixing, preferably with a high shear mixer, may be required to ensure the expected conductivity is achieved.

*Actual results will depend on the substrate used. These results were obtained for VC100 ink screen printed on PET type MELINEX ST505 from DTF and PC type MAKROFOL DE 1-1 175 µm from Bayer Material Science.

**This is a proprietary topcoat based on an ionic polymer that permanently fixes the CNT to the surface and improves the refractive index matching.