

Product Description

Dycotec Materials provide transparent conductive dispersions based on silver nanowires. These materials typically work in combination with our protective transparent overcoat inks (DM-OC-6000 range). Offering a cost effective, durable and flexible alternative to TCO (Transparent Conductive Oxide).

Applications for transparent coatings include; transparent electrodes for touch screens, PV, OLED devices and display. Silver nanowire ink systems can be tailored to meet particular specifications.

Product Benefits

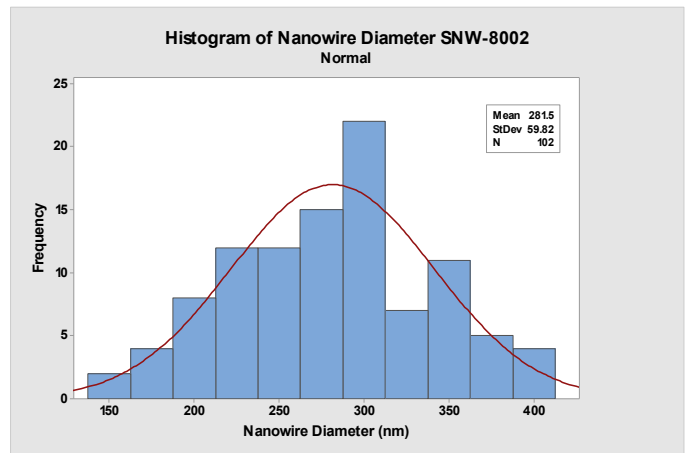
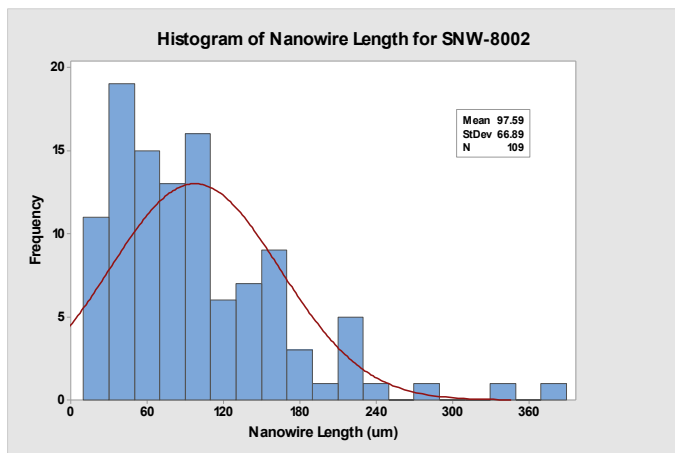
- Good Conductivity (10 Ω/\square /mil)
- High transparency (>85%)
- High Aspect ratio (>340)
- Extra long nanowire length (~100 μm)

Silver Nanowire Dispersions

Silver nanowire dispersions are supplied in water, alcohols or other solvents as per customer request. Shake well before use. Once the dispersion has been removed from the container for printing, this may introduce contamination. Please do not replace the ink in the container.

Properties of Silver Nanowires

Width	150-400 nm
Average Length	100 μm



Test	Typical Properties
Solids Content - standard	0.5 %

Ink Processing Conditions

Test	Typical Properties
Substrate	PET, Glass
Deposition	Spray, Spin-coat, Slot-die
Available solvents	Water, Alcohols, By Request

Properties dispersed Ag Nanowires

Test	Typical Properties
Typical conductivity	~ 10-1000 Ω/\square
Typical Transparency at 550 nm	>85-95 %

Overcoat

For long term reliability, please use with Dycotec Materials' overcoat products. Please contact us at info@dycotecmaterials.com for further information.

Storage and shelf-life

Containers should be stored at room temperature (10-25°C) with lids tightly sealed. The product shelf-life for an unopened container is 6 months from date of shipment. **The material should not be stored at temperatures below 0°C or greater than 30°C.** Dycotec Materials cannot assume responsibility for a product that has not been stored in appropriate conditions or where the product has been contaminated following use.

Safety and Handling

For safe use of this product, please review relevant material and safety datasheet (MSDS).

For more information, please contact:

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up. More detailed information can be obtained via info@dycotecmaterials.com.

Note: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Dycotec Materials specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale of use of Dycotec Materials' products. Dycotec Materials specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a licence under any Dycotec Materials' patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one of or more UK or foreign patents or patent applications.