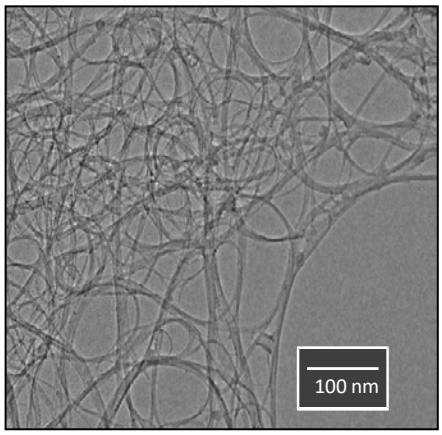
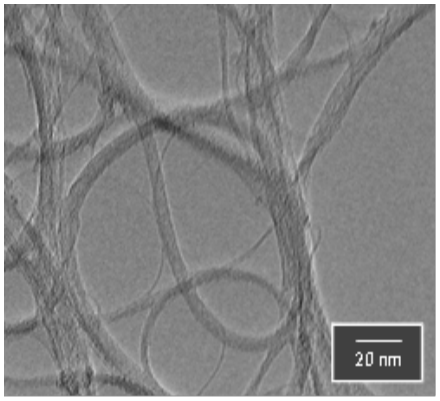
SG65i

(6,5) Enriched Single-Wall Carbon Nanotubes

Produced using CoMoCAT™ synthesis technology, SG65i is a single-wall carbon nanotube (CNT) product uniquely enriched in semiconducting tubes, with (6,5) chirality being most abundant. Approximately 95% of the CNTs in SG65i are semiconducting, with approximately 41% of those tubes being (6,5) chirality. SG65i is targeted for transistor, sensor, and biomedical applications.

Property	SG65i	Measurement
Carbon Purity	≥ 95 wt%	TGA
CNT Purity	≥ 94 wt%	TGA
Semiconducting CNT Content	95%	Opt. Abs.
(6,5) CNT Content	≥ 40%	NIRF
Average Diameter	0.78nm	NIRF
Median Length	1 µm	AFM
Bulk Density	0.1 g/cm³	ASTM D7481
Moisture Content	≤ 5 wt%	TGA
Specific Surface Area	≥ 700 m²/g	BET
G/D Ratio	≥ 20	Raman (633nm)





Standard Product Forms: Powder

Other product forms can be supplied upon request, including Wet Cake, Dispersions, Coating Formulations, Inks, Buckypaper, Coated Films, Patterned Films, etc.

Let us help you!

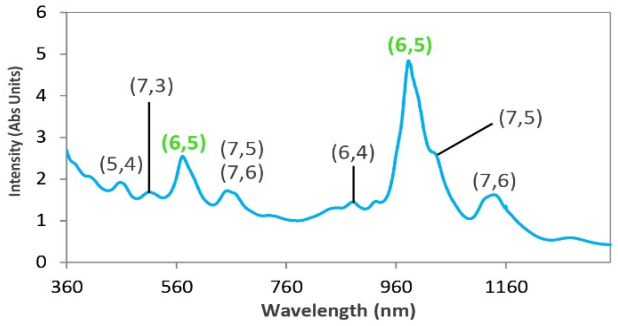
The material scientists and engineers in CHASM's Application Development Center are available to help you determine the product form that is optimal within your application, and provide the guidance to make it scalable and commercially viable.

SG65i

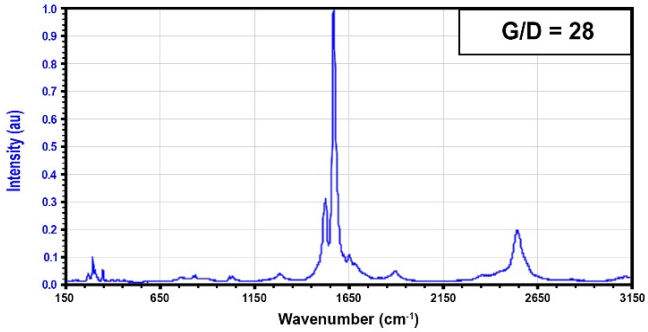
Supporting Data

Optical Absorbance (UV-vis-NIR)

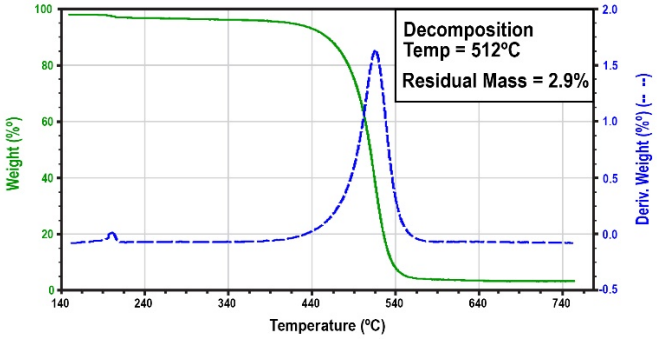
OA Peaks Corresponding to Eii Transition Energies of Included Chiral Species



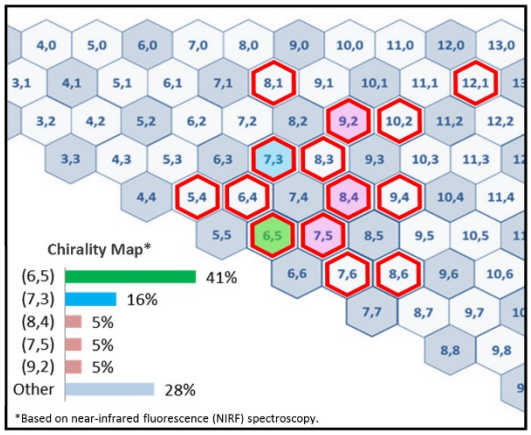
Raman Analysis (633 nm)



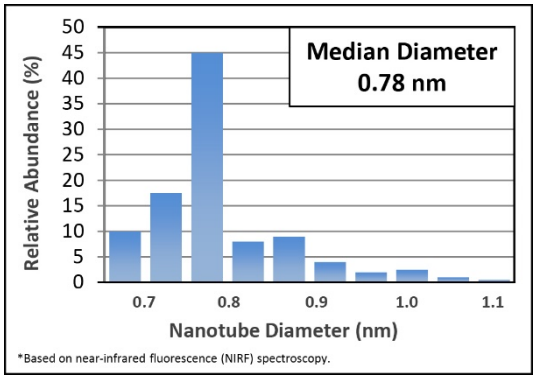
Thermogravimetric Analysis



Chirality Distribution



Diameter Distribution



Applications Engineers are available to provide additional data and technical support to help you integrate Signis CNTs into your application. Email sales@chasmtek to request additional information.