

NANOMYTE® BE-110E

(10% SiO_x-Graphite electrode sheets)

Active Material Characteristics

Product ID:	BE-110E (single-sided) BE-110E-DS (double-sided)
Active Material:	10% Silicon Oxide-Graphite composite
Material Class:	Anode material
Average Particle Size (D₅₀):	~5µm (SiO _x) ~17µm (natural graphite)

Electrode Tape Characteristics

Current Collector:	Copper (10 µm thick)
Standard Sheet Size:	5 in x 10 in (127 mm x 254 mm) coated edge-to-edge
Calendered:	Yes
Electrode Coating:	Single or Double-sided sheets (as specified)
Coating Thickness:	51 µm ± 5% (per side, excluding current collector)
Standard Areal Capacity:	2.4 mAh/cm ² ± 5% (per side)
Active Material Loading:	5.3 mg/cm ² ± 5% (per side)

Standard Tape Composition:	Weight %	Material	Description
	77.5%	Natural Graphite	(active material)
	10.0%	SiO _x	(active material)
	7.0%	SBR-PAA-CMC	(water-based binder)
	5.5%	MWCNT-Carbon Black mixture	(conductive carbon)

**Specifications can be modified upon request to accommodate different active material loadings, coating thickness, & capacity.*

Electrochemical Characteristics

Average Voltage vs. Li/Li+:	0.1 V
Minimum Delithiation Capacity:	425 mAh/g (0.01 – 1.2V @ 0.05C)
Nominal Capacity:	≥ 450 mAh/g (0.01 – 1.2V @ 0.05C)

Ordering Increments

NEI's electrode sheets are supplied in price-break tiers of 2, 5, 10, 25, 50, & 100 sheets, with a 2-sheet minimum per material. Bulk quantities are available upon request.

Precautions for Safe Handling & Storage

Handling: Personal protective equipment should be used at all times. Avoid contact with eyes and skin. Handle in a dry and well-ventilated area. Avoid actions that abrade, sand, or grind the coated surface. Such actions can release respirable and combustible dust.

Storage: Store sheets flat and in a cool, dry place, away from heat and moisture.

Note: In its manufactured and shipped form, this article does not pose a physical hazard or health risk to humans or the environment. However, processing that generates dust or exposure to extreme temperatures may release hazardous particles.

Refer to SDS for complete safety information of this material. **Note: this product should not be used in any commercial battery.**

DISCLAIMER: NEI Corporation believes this information accurately describes the product's typical characteristics. NEI disclaims liability for any incidental or consequential damages resulting from use beyond its control. This data is a supplement to the user's own investigations; it is the user's responsibility to independently determine the product's suitability, performance, and safety for their specific application. Nothing herein constitutes a recommendation to infringe upon any patent or intellectual property right.