

**Active Material Characteristics**

**Product Name:** NANOMYTE® BE-400E  
**Product Description:** Niobium Oxide electrode sheet  
**Formula:** Nb<sub>2</sub>O<sub>5</sub>  
**Purity:** > 99%  
**Average Particle Size (APS):** 30 – 70nm

**Standard Electrode Tape Characteristics**

**Current Collector:** Copper  
**Current Collector Thickness:** 10 µm  
**Sheet Size:** 5 in x 10 in (12.7 cm x 25.4 cm)  
**Areal Capacity:** 1.44 mAh/cm<sup>2</sup> ± 5%  
**Tape Thickness:** 110 µm ± 5% (excluding current collector)

Standard Tape Composition:	%	Material	Description
	81%	Niobium oxide	(active material)
	6%	CMC-SBR	(water-based binder)
	13% <sup>#</sup>	Carbon	(conductive carbon)

<sup>#</sup>Total Carbon in the electrode including 2% Super P, 2% carbon nanofiber, and 9% graphite nanosheet is 13%.

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

**Electrical Characteristics**

**Average Voltage vs. Li/Li<sup>+</sup>:** 1.6 V  
**Minimum Delithiation Capacity at 0.05C:** 140 mAh/g  
**Nominal Capacity at 0.05C:** ≥ 150 mAh/g

**Recommended Operating Conditions**

<b>Maximum Charge Voltage:</b> 3V vs. Li/Li <sup>+</sup>	<b>Maximum Charge Current:</b> 10C (6C recommended)
<b>Maximum Discharge Voltage:</b> 1V vs. Li/Li <sup>+</sup>	<b>Maximum Discharge Current:</b> 10C (6C recommended)

**Available Quantities**

NEI's standard electrode sheets are available in packages of 2, 5, 10, and 20 sheets. Bulk quantities are also available.

**Storage & Handling**
**Precautions for Safe Handling**

Personal protective equipment should be used at all times. Avoid contact with eyes and skin. Ensure adequate ventilation and avoid inhalation of dusts. Wash hands thoroughly after handling.

**Conditions for Safe Storage**

Store in a dry and sealed pouch or under inert atmosphere, away from heat. Avoid moisture.

**Refer to SDS for complete information on the safe handling of this material.**

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