

NANOMYTE® BE-600E (Titanium Niobium Oxide)

Active Material Characteristics

Product IDs:	BE-600E (single-sided) BE-600E-DS (double-sided)
Product Description:	Titanium Niobium Oxide
Formula:	TiNb ₂ O ₇
Average Particle Size (D₅₀):	3.69 μm
Specific Surface Area:	1.43 m ² /g

Electrode Tape Characteristics

Current Collector:	Copper (10 μm thick)
Sheet Dimensions:	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:	70 μm ± 5% (excluding current collector)
Areal Capacity:	2.4 mAh/cm ² ± 5% (per side)
Active Material Loading:	9.8 mg/cm ² ± 5% (per side)

Standard Tape Composition:

Wt. %	Material	Description
90%	Titanium Niobium Oxide	(active material)
5%	Poly(vinylidene fluoride) ["PVDF"]	(binder)
5%	Carbon Black ["Super P"]	(conductive carbon)

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

Electrochemical Characteristics

Typical First Charge Capacity (vs. Li/Li ⁺):	245 mAh/g	Avg Charge Voltage vs. Li/Li⁺:	1.58 V
Typical First Discharge Capacity (vs. Li/Li ⁺):	255 mAh/g	Voltage Range:	1.0 – 2.5V @ 0.1C
Minimum Delithiation Capacity (vs. Li/Li ⁺):	235 mAh/g		

Available Quantities

Electrode sheets are available in packs of 2, 5, 10, 25, 50, & 100 sheets. Bulk quantities & rolls available upon request.

Precautions for Safe Storage & 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. Store in a dry and sealed pouch or under inert atmosphere, away from heat. Avoid moisture. [Refer to SDS for complete safety information of this material.](#)

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