

NANOMYTE® BE-10CE (Carbon-LTO) Specification Sheet

Active Material Characteristics

Product Name: NANOMYTE® BE-10CE

Product Description: Carbon-coated Lithium Titanate (LTO) electrode sheet

Formula: $\text{Li}_4\text{Ti}_5\text{O}_{12}$ with 1-3 wt% carbon coating

Purity: > 98%

Average Particle Size (APS): $3-5 \mu m$ Specific Surface Area: $16 \pm 1 m^2/q$

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)

Capacity: $1.25 \text{ mAh/cm}^2 \pm 5\%$

Tape Thickness: 55 – 60 μm (excluding current collector)

Standard Tape Composition: 90% Carbon-coated Lithium Titanate ["C-LTO"] (active material)

5% Poly(vinylidene fluoride) ["PVDF"] (binder)

5% Carbon Black ["Super P"] (conductive carbon)

Electrical Characteristics

Nominal Voltage vs. Li/Li⁺: 1.53V Nominal Capacity at 0.1C: ≥ 170 mAh/g

Minimum Capacity: 150 mAh/g

Capacity Retention at 30C: ≥ 150 mAh/g

Recommended Operating Conditions

Maximum Charge Voltage: 3.0V vs. Li/Li⁺ Cutoff Voltage for Discharge: 1.0V vs. Li/Li⁺

Maximum Charge Current: 5C Maximum Discharge Current: 10C

Available Quantities

NEI's standard electrode sheets are ready-to-ship and available in packages of 2, 5, and 10 sheets

Storage & Handling

Precautions for Safe Handling

Appropriate personal protective equipment should be used at all times. Avoid contact with eyes and skin. Wash hands thoroughly after handling.

Conditions for Safe Storage

Store in a dry and well-ventilated place. Avoid moisture.

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

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