
Active Material Characteristics

Product Name:	NANOMYTE® BE-45E
Product Description:	Lithium Nickel Cobalt Aluminum Oxide (NCA) electrode sheet
Formula:	$\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$
Purity:	> 98%
Average Particle Size (D₅₀):	11 – 13 μm
Specific Surface Area:	0.4 – 0.5 m ² /g

Standard Electrode Tape Characteristics

Current Collector:	Aluminum
Current Collector Thickness:	16 μm
Sheet Size:	5 in x 10 in (12.7 cm x 25.4 cm)
Capacity:	2 mAh/cm ² ± 5% (custom material loading available upon request)
Tape Thickness:	60 – 65 μm (excluding current collector)
Standard Tape Composition:	90% Lithium Nickel Cobalt Aluminum Oxide ["NCA"] (active material) 5% Poly(vinylidene fluoride) ["PVDF"] (binder) 5% Carbon Black ["Super P"] (conductive carbon)

Electrical Characteristics

Nominal Voltage vs. Li/Li⁺:	3.7V
Minimum Capacity:	170 mAh/g
Nominal Capacity at 0.1C:	≥ 190 mAh/g

Recommended Operating Conditions

Charge Method:	Constant current – constant voltage
Maximum Charge Voltage:	4.3V vs. Li/Li ⁺
Maximum Charge Current:	4C
Cutoff Voltage For Discharge:	3.0V vs. Li/Li ⁺
Maximum Discharge Current:	4C

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. Provide good ventilation or extraction. Avoid contact with eyes and skin. Wash hands thoroughly after handling.

Conditions for Safe Storage

Keep container tightly closed in a moisture-free and well-ventilated place.

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

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