

NANOMYTE® NAB-30E

Active Material Characteristics

Product IDs:	NAB-30E (single-sided) NAB-30E-DS (double-sided)
Product Description:	Sodium Manganese Oxide electrode sheet
Formula:	Na _{0.44} MnO ₂
Average Particle Size (D₅₀):	1 – 2 μm
Specific Surface Area:	4 – 5 m ² /g

Electrode Tape Characteristics

Current Collector:	Aluminum
Current Collector Thickness:	16 μm
Sheet Size:	5 in x 10 in (127 mm x 254 mm)
Coating:	Single or Double-sided sheets (as specified)
Areal Capacity:	0.90 mAh/cm ² ± 5% (per side)
Active Material Loading:	8.6 mg/cm ² ± 5% (per side)
Tape Thickness:	72 – 80 μm (excluding current collector)

Standard Tape Composition:	%	Material	Description
	85%	Sodium Manganese Oxide (Na _{0.44} MnO ₂)	(active material)
	10%	Carbon Black ["Super P"]	(conductive carbon)
	5%	Poly(vinylidene fluoride) ["PVDF"]	(binder)

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

Electrical Characteristics

Nominal Voltage vs. Li/Li⁺:	2.8 V
Minimum Capacity:	100 mAh/g
Experimental Capacity:	≥ 105 mAh/g (@ 0.1C)

Recommended Operating Conditions

Maximum Charge Voltage:	3.8 V vs. Na/Na ⁺	Cutoff Voltage for Discharge:	2.0 V vs. Na/Na ⁺
Maximum Charge Current:	2C	Maximum Discharge Current:	2C

Available Quantities

NEI's standard electrode sheets are available in packages of 2, 5, 10, 25, 50, & 100 sheets. Bulk quantities also available.

Precautions for Safe Storage & Handling

Appropriate personal protective equipment should be used at all times. Provide appropriate exhaust ventilation at places where dust is formed. Keep sealed in a dry and well-ventilated place. [Refer to SDS for complete safety information of this material.](#)

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