

NANOMYTE® BE-30E (LMO)

Active Material Characteristics

Product Description:	Lithium Manganese Oxide (LMO) electrode sheet
Formula:	LiMn ₂ O ₄
Average Particle Size (D₅₀):	6 – 7 μm
Specific Surface Area:	1.6 – 2.4 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:	1.25 mAh/cm ² ± 5% (per side)
Active Material Loading:	12.5 mg/cm ² ± 5% (per side)
Tape Thickness:	70 μm ± 5% (excluding current collector)

Standard Tape Composition:	%	Material	Description
	90%	Lithium Manganese Oxide ["LMO"]	(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

Electrical Characteristics

Nominal voltage vs. Li/Li⁺:	4.0V
Minimum capacity:	90 mAh/g
Experimental capacity:	≥ 100 mAh/g (3 – 4.2V @ 0.1C)

Recommended Operating Conditions

Maximum Charge Voltage:	4.35V vs. Li/Li ⁺	Cutoff Voltage for Discharge:	3.0V vs. Li/Li ⁺
Maximum Charge Current:	2C	Maximum Discharge Current:	2C

Available Quantities

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

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.](#)

NOTE: NEI Corporation believes that the information in this spec sheet is an accurate description of the typical use of the product. However, NEI disclaims any liability for incidental or consequential damages, which may result from the use of their products that are beyond its control. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. Therefore, it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy, and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual right.