

# NANOMYTE® Electrode Sheets

## Cast Electrode Tapes for Lithium-ion Batteries

NEI offers a variety of cathode and anode electrode sheets suitable for a wide range of applications. Standard electrode sheets are 5 inches x 10 inches (127 mm x 254 mm) and cast either single-sided or double-sided on aluminum (cathode) or copper foil (anode) current collectors. NEI also offers custom tailored solutions for customers with unique specification requirements. Our cast electrodes can be modified to accommodate different active material loadings, coating thickness, and binder type / content upon request.

### List of NANOMYTE® Anode & Cathode Tapes & Specifications:

Product ID	Active Material (Formula)	Avg. Particle Size (µm)	Active Loading* (mg/cm <sup>2</sup> )	Areal Capacity* (mAh/cm <sup>2</sup> )	Nominal Capacity at 0.1C (mAh/g)
BE-10E	Lithium Titanate (Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> )	1.5 – 3	7.3	1.25	~ 170
BE-10CE	Carbon-coated Lithium Titanate (Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> )	3 – 5	7.8	1.25	~ 160
BE-150E	Silicon-Graphite composite (Si-C)	< 20	1.25 <sup>^</sup>	4.0	≥ 750 <sup>#</sup>
BE-200E	Graphite (C)	15 – 20	6.5	2.4	≥ 370
BE-300E	Activated Carbon (C)	5 – 10	5.7	1.25	≥ 220
BE-400E	Niobium Oxide (Nb <sub>2</sub> O <sub>5</sub> )	30 – 70nm	8.00	1.44	≥ 150 <sup>#</sup>
BE-500E	Hard Carbon (C)	5 – 10	10.9	2.4	≥ 220
BE-20E	Lithium Cobalt Oxide (LiCoO <sub>2</sub> )	13 – 14	12.5	2.0	≥ 155
BE-30E	Lithium Manganese Oxide (LiMn <sub>2</sub> O <sub>4</sub> )	6 – 7	12.5	1.25	≥ 100
BE-35E	Lithium Manganese Oxide (LiMn <sub>2</sub> O <sub>4</sub> )	11	12.5	1.25	≥ 100
BE-45E	Lithium Nickel Cobalt Aluminum Oxide (LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> )	11 – 13	10.5	2.0	≥ 190
BE-50E	Lithium Nickel Manganese Cobalt Oxide (LiNi <sub>0.33</sub> Mn <sub>0.33</sub> Co <sub>0.33</sub> O <sub>2</sub> )	8 – 12	12.9	2.0	≥ 155
BE-52E	Lithium Nickel Manganese Cobalt Oxide (LiNi <sub>0.5</sub> Mn <sub>0.3</sub> Co <sub>0.2</sub> O <sub>2</sub> )	8 – 12	12.1	2.0	≥ 165
BE-54E	Lithium Nickel Manganese Cobalt Oxide (LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> )	10 – 13	11.4	2.0	≥ 175
BE-56E	Lithium Nickel Manganese Cobalt Oxide (LiNi <sub>0.8</sub> Mn <sub>0.1</sub> Co <sub>0.1</sub> O <sub>2</sub> )	10 – 13	10.0	2.0	≥ 200
BE-60E	Lithium Iron Phosphate (LiFePO <sub>4</sub> )	~2	7.3	1.25	≥ 170
BE-70E	Sublimed Sulfur (S)	n/a	3.7	3.0	≥ 800
SP-10E	Lithium Manganese Nickel Oxide (LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> )	4 – 7	16.0	2.0	≥ 125
SP-10CE	LATP-coated Lithium Manganese Nickel Oxide (LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> )	5 – 8	16.0	2.0	≥ 125

**Note:** \*Values within ± 5%; \*Measured @ 0.05C; ^Based on Silicon content only

### Available for Purchase

NEI's standard electrode sheets are available for purchase in ready-to-ship packages of 2, 5, or 10 sheets (per material). We can also supply larger quantities or customize tape specifications – such as loading, thickness, binder, & collector – upon request (additional fee may apply). **Request a quote today!**

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[www.neicorporation.com](http://www.neicorporation.com)

400 Apgar Drive, Unit E | Somerset, NJ 08873 | (732) 868-3141 | sales@neicorporation.com