

NANOMYTE® BE-45 (NCA)

Material Characteristics

Product Description:	Lithium Nickel Cobalt Aluminum Oxide (NCA) powder
Formula:	$\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$
Average Particle Size (D_{50}):	11 – 13 μm
Specific Surface Area:	0.4 – 0.5 m^2/g

Electrical Characteristics

Nominal voltage vs. Li/Li⁺:	3.7V
Minimum capacity:	170 mAh/g
Experimental capacity:	$\geq 190 \text{ mAh/g}$ (3 – 4.2V @ 0.1C)

Recommended Operating Conditions

Maximum Charge Voltage:	4.3V vs. Li/Li ⁺	Cutoff Voltage for Discharge:	3.0V vs. Li/Li ⁺
Maximum Charge Current:	2C	Maximum Discharge Current:	2C

Available Quantities

NEI's cathode and anode powders are available for purchase in quantities of 500 grams or more.

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 well-ventilated place. Avoid moisture. [Refer to SDS for complete safety information of this material.](#)

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