

Specification Sheet

NANOMYTE® BE-40 (NCA)

PHYSICAL CHARACTERISTICS

Chemical Name:	Lithium Nickel Cobalt Aluminum Oxide
Formula:	$\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$
Color:	Black
Purity:	> 98%
Average Particle Size (APS):	2 – 5 μm
Grain Size:	100 – 250 nm
Crystal Structure:	Rhombohedral
Crystal Density:	4.45 g/cm^3
Tap Density:	1.5 – 2.0 g/cm^3
Specific Surface Area:	1.5 – 3.0 m^2/g
Stable Temperature Range:	Up to 700°C

ELECTRICAL CHARACTERISTICS

Nominal voltage vs. Li/Li⁺:	3.7V
Minimum capacity:	150 mAh/g
Nominal capacity at 0.1C:	≥ 180 mAh/g

OPERATING CONDITIONS

Recommended charge method:	Constant current – constant voltage
Recommended maximum charge voltage:	4.2V vs. Li/Li ⁺
Recommended maximum charge current:	4C
Recommended cutoff voltage for discharge:	3.0V vs. Li/Li ⁺
Recommended maximum discharge current:	4C

STORAGE & HANDLING

Conditions for Safe Storage

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

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.

Refer to MSDS for further information.