

## Specification Sheet

## NANOMYTE® SP-10C (LATP-coated LMNO)

### MATERIAL CHARACTERISTICS

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<b>Chemical Name:</b>	LATP-coated Lithium Manganese Nickel Oxide
<b>Formula:</b>	$\text{LiMn}_{1.5}\text{Ni}_{0.5}\text{O}_4$ with 1 – 5wt% LATP
<b>Color:</b>	Black
<b>Purity:</b>	> 98%
<b>Average Particle Size (APS):</b>	5 – 8 $\mu\text{m}$
<b>Grain Size:</b>	50 – 70 nm
<b>Crystal Structure:</b>	Cubic – Fd3m (227)
<b>Crystal Density:</b>	4.45 g/cm <sup>3</sup>
<b>Tap Density:</b>	1.6 – 1.7 g/cm <sup>3</sup>
<b>Specific Surface Area:</b>	1.2 – 1.3 m <sup>2</sup> /g
<b>Stable Temperature Range:</b>	Up to 700 °C

### ELECTRICAL CHARACTERISTICS

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<b>Nominal voltage vs. Li/Li<sup>+</sup>:</b>	4.7V
<b>Minimum capacity:</b>	110 mAh/g
<b>Nominal capacity at 0.1C:</b>	≥ 125 mAh/g

### OPERATING CONDITIONS

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<b>Recommended charge method:</b>	Constant current – constant voltage
<b>Recommended maximum charge voltage:</b>	5.0V vs. Li/Li <sup>+</sup>
<b>Recommended maximum charge current:</b>	5C
<b>Recommended cutoff voltage for discharge:</b>	3.5V vs. Li/Li <sup>+</sup>
<b>Recommended maximum discharge current:</b>	5C

### STORAGE & HANDLING

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#### 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.**