



Date of issue: 10/08/10

Nanomyte™ SP-15

Lithium Manganese Nickel Oxide Specification Sheet

Part Number	NEI-SP15
-------------	----------

Physical characteristics	
Chemical Composition	LiMn _{1.5} Ni _{0.5} O ₄
Purity	>98%
Average Particle Size (APS)	5 μm
Grain Size	300-500 nm
Crystalline Density	4.45 g/cm ³
Crystal Structure	Cubic - Fd $\bar{3}$ m (227)
Tap Density	1 - 1.5 g/cm ³
Surface Area	<2 m ² /g
Color	Black
Stable Temperature Range	Up to 700°C

Electrical Characteristics	
Nominal voltage vs. Li/Li ⁺	4.7V
Nominal capacity at 0.1C	120-125 mAh/g
Minimum capacity	110 mAh/g

Operating Conditions	
Recommended charge method	Constant current - constant voltage
Recommended maximum charge voltage	5.0V vs. Li/Li ⁺
Recommended maximum charge current	5C
Recommended cutoff voltage for discharge	3.5V vs. Li/Li ⁺
Recommended maximum discharge current	5C

Safety Note:

Protection from moisture contamination is needed. Appropriate personal protection equipment, including gloves and mask, should be worn while handling the material. Refer to MSDS for more information.

Known Applications:

Lithium ion batteries - Cathode - High Power & High Energy Density Applications

400 Apgar Drive, Unit E - Somerset, NJ 08873

Phone: (732) 868-3141 - Fax: (732) 868-3143

sales@neicorporation.com

www.neicorporation.com