



MATERIAL SAFETY DATA SHEETS

For

NI-MH BATTERY

Report No. : CTL 250103082-MSDS

Applicant : SHENZHEN MANLY BATTERY CO.,LTD

Address : 23 Block, North Area FuQuan Xin Cun .LongHua, ShenZhen, China

Manufacturer : SHENZHEN MANLY BATTERY CO.,LTD

Address : 23 Block, North Area FuQuan Xin Cun .LongHua, ShenZhen, China

Data of Issue : Jan 08, 2025


Manager Jacky Chen





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Section 1

Identification of the substance /preparation and of the company/undertaking

Identification of the preparation : 2.4V 2000mAh AA NI-MH
Company Identification : SHENZHEN MANLY BATTERY CO.,LTD
Company Address : 23 Block, North Area FuQuan Xin Cun .LongHua, ShenZhen,China
Fax : 0755-29178503
Off-hour Emergency Phone Number : 0755-23323658
Mail : /
MSDS No. : CTL250103082-MSDS

Section 2

Composition/ Information on Ingredients

Substance/Preparation : NI-MH BATTERY

Component of NI-MH BATTERY:

Component / Substance	Percentage by weight
Nickel Hydroxide	29%
Cobalt Oxide	5%
Steel	8%
Nickel	10%
PVC	5%
Potassium Hydroxide (Liquid)	3%
Sodium Hydroxide	2%
Rare Earth Alloy	35%
Polypropylene	3%



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Section 3

Hazards Identification

Preparation hazards and classification : Not dangerous with normal use. Do not dismantle, open or shred NI-MH BATTERY the ingredients contained within or their ingredients products could be harmful.

Apperance,Color, and Odor: Solid object with no odor, no color.

Primary Route(s) of Exposure: These chemicals are contained in a sealed stainless steel enclosure. Risk of exposure occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs, exposure to the electrolyte solution contained within can occur by Inhalation, Ingestion, Eye contact and Skin contact

Potential Health Effects:

ACUTE (short term): see Section 8 for exposure controls In the event that this battery has been ruptured, the electrolyte solution contained within the battery would be corrosive and can cause burns.

Inhalation: Inhalation of materials from a sealed battery is not an expected route of exposure. Vapors or mists from a ruptured battery may cause respiratory irritation.

Ingestion: Swallowing of materials from a sealed battery is not an expected route of exposure. Swallowing the contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

Skin: Contact between the battery and skin will not cause any harm. Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

Eye: Contact between the battery and the eye will not cause any harm. Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

CHRONIC (long term): see Section 11 for additional toxicological data

Medical Conditions Aggravated by: Not applicable

Section 4

First Aid Measures

Skin and Eyes:

In the event that battery ruptures, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

Inhalation:

If vapors or fumes from vented or leaking battery are irritating to respiratory tract, move to fresh air. Seek medical attention immediately.

Ingestion:

Ingestion of a battery can be harmful. Call The National Capital Poison Control Center or your local Poison Control Center, day or night - for advice and follow-up.



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Section 5

Fire-Fighting Measures

Combustible: Not applicable

Special fire-fighting Procedures:

As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition product

Hazardous thermal (de) composition products:

Like any sealed container, battery cells may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.

Emergency treatment: Use water, foam or dry powder, as appropriate

Section 6

Accidental Release Measures

Procedures to contain and clean up leaks or spills:

In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

Reporting procedure:

Report all spills in accordance with Federal, State and Local reporting requirements.

Waste disposal method:

Earth or sand should be used to absorb the exudation, seal leaking battery and earth in a heavy duty polythene bag and dispose of as special waste in accordance with local regulations.

Section 7

Handling and Storage

Handling precautions:

Do not short circuit or expose to temperatures above the temperature rating of the battery.

Do not recharge, over-discharge, force discharge, immerse, puncture or crush.

Storage:

Store in a cool place but prevent condensation on cells and batteries. Elevated temperatures can result in shortened battery life and degrade performance. Do not store batteries in high humidity environments for long periods of times.

Batteries may explode or cause burns, if disassembled, crushed, or exposed to fire or high temperatures. Do not short or install with incorrect polarity.



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Section 8

Exposure Controls/ Personal Protection

Respiratory protection:

Wear a niosh approved self contained breathing apparatus in the pressure demand mode, or a fullface supplied air respirator.

Ventilation:

Mechanical ventilation and / or local exhaust, sufficient in pattern and volume, to meet tlv requirements

Protective gloves:

Use polyethylene or nitrile gloves if frequent skin contact is likely.

Eye protection:

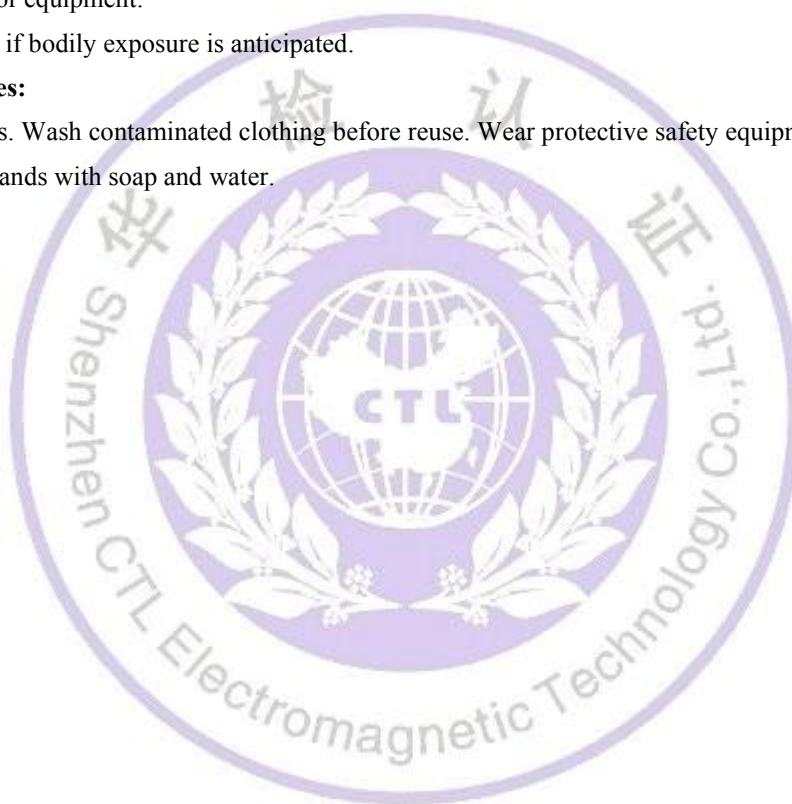
Safety glasses with splash guards or side shielding recommended.

Other protective clothing or equipment:

Wear impervious clothing if bodily exposure is anticipated.

Work / Hygienic practices:

Do not wear contact lenses. Wash contaminated clothing before reuse. Wear protective safety equipment as necessary to minimize contact. Wash hands with soap and water.





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Section 9

Physical and Chemical Properties

Appearance:	Solid	Color	Silvery
Smell:	No data	PH	No data
Solubility:	No data	Melting Point	No data
Flash point:	No data	Explosive	No data
Specific heat:	No data	Flammability	No data

Section 10

Stability and Reactivity

Stability:

Product is stable under normal storage and handling conditions.

Conditions to avoid:

High temperatures or incinerate. Deform, mutilate, crush, Pierce, short circuit. expose over a long period to humid conditions

Materials to avoid:

Oxidizing agents, alkalis, water.

Section 11

Toxicological Information

Acute Toxicity:

Inhalation : Lung irritant

Ingestion : Poisoning if

Eye Contact : Eye irritant

Skin Contact : Skin irritant

Chronic Toxicity : No data available

Sensitization : No data available

Mutagenicity : No data available

Carcinogenicity : No data available

Reproductive Toxicity : No data available

Other : No data available



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Section 12

Ecological Information

Ecotoxicity: No data available.

Environmental Fate: No data available.

Environmental Degradation: No data available.

Soil Absorption/Mobility: slowly bio-degradable

Section 13

Disposal Considerations

Waste Nature:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste

Recovery and reuse:

Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

Section 14

Transport Information

NI-MH BATTERY (2.4V 2000mAh AA) is exempt from dangerous goods. It is considered non-dangerous goods by the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) DGR 66th, IATA Special Provisions A199, 《Recommendations on the Transport of Dangerous Goods Model Regulations》(23rd).

S.P.A123 This entry applies to Batteries, electric storage, not otherwise listed in Subsection 4.2 –List of Dangerous Goods. Examples of such batteries are: alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery or battery powered device, equipment or vehicle having the potential of dangerous evolution of heat must be prepared for transport so as to prevent (a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals) is forbidden from transport; and (b) accidental activation. The words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued. Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

Note: Products weighing less than 100kg in the Container. (By sea).

Transport Fashion: By air, by sea, by railway, by road.



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Section 15

Regulatory Information

OSHA hazard communication standard (29 CFR 1910.1200)
Hazardous ✓ Non-hazardous

Section 16

Other Information

Department: Quality department.

Data Audit Units: Shenzhen CTL Electromagnetic Technology Co., Ltd..

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***** END OF REPORT *****