

# MSDS Report

Product Name: Ni-MH Cell  
( 1.2V AAA )

Client Name: SHENZHEN JINMINGNENG BATTERY  
TECH CO., LTD

Client Address: Da Bu Xin Cun 16th building, Song  
Yuan Xia Village Community, Guanlan  
Street, Baoan Longhua District,  
Shenzhen, China

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Approved by:

Renee Xie





## Material Safety Data Sheet

### Section 1: Chemical Product and Company Identification

Product Name: Ni-MH Cell  
 Cell Type: AAA  
 Manufacturer: SHENZHEN JINMINGNENG BATTERY TECH CO., LTD  
 Address: Da Bu Xin Cun 16th building, Song Yuan Xia Village Community, Guanlan Street, Baoan Longhua District, Shenzhen, China  
 Post Code: N/A  
 Tel: 020-82713780  
 Emergency Telephone: 020-82713780  
 Fax: 020-82713780  
 E-mail: N/A

### Section 2: Composition and Information on Ingredients

Chemical Name	CAS No.	Weight(%)
Nickel hydroxide	12054-48-7	11-26
Cobalt Oxide	11104-61-3	8-15
Lithium hydroxide	1310-65-2	3-10
Potassium Hydroxide(Liquid)	1310-58-3	< 5
Sodium hydroxide	1310-73-2	< 2
Hydrogen storage alloy powder	--	11-26
Nylon	--	< 2
Iron	7439-89-6	12-13
Others	--	<1

### Section 3: Hazards Identification

#### Health Hazards (Acute and Chronic)

These chemicals are contained in a sealed can. Risk of exposure occurs only if the cell is mechanically or electrically abused. Leaking material exposure to skin, eyes may cause irritation. Inhalation of fumes may cause respiratory irritation.

#### Sign/Symptoms of Exposure

Leaking can cause thermal and chemical burns upon contact with the skin. May be a reproductive hazard.



#### Section 4 - First Aid Measures

##### **Eye**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

##### **Skin**

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

##### **Inhalation**

Remove from exposure and move to fresh air immediately. Use oxygen if available.

##### **Ingestion**

Do not induce vomiting. Call a physician immediately.

#### Section 5 - Fire Fighting Measures

**Flash Point:** N/A.

**Auto-Ignition Temperature:** N/A.

##### **Extinguishing Media**

Water, CO<sub>2</sub>, dry chemical.

##### **Firefighting**

In case of fire in an adjacent area, use water, CO<sub>2</sub> or dry chemical extinguishers if cells in their original containers since the fuel of the fire is basically paper products. For bulk quantities of unpackaged cells use suitable extinguishers. In this case, do not use water.

#### Section 6 - Accidental Release Measures

##### **Steps to be Taken in case Material is Released or Spilled**

If the cell material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the cell to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

##### **Waste Disposal Method**

It is recommended to discharge the cell to the end, handing in the abandoned cells to related department unified, dispose of the cells in accordance with approved local, state, and federal requirements. Consult state environmental protection agency and/or federal EPA.



### Section 7 - Handling and Storage

The cell should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the cell, forced over-discharge, throw to fire. Do not crush or puncture the cell, or immerse in liquids.

#### Precautions to be taken in Handling and Storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the cell near heating equipment, nor expose to direct sunlight for long periods.

#### Other Precautions

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

### Section 8 - Exposure Controls, Personal Protection

#### Respiratory Protection

In case of cell venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

#### Ventilation

Not necessary under conditions of normal use.

#### Protective Gloves

Not necessary under conditions of normal use.

#### Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

Personal Protection is recommended for venting cell: Respiratory protection, Protective gloves, protective clothing and safety glass with side shields.

### Section 9 - Physical and Chemical Properties

**Nominal Voltage:** 1.2V.

**Rated Capacity:** AAA

**Size:** 10.0\*43.4mm

**Appearance characters:** Cylindrical cell

**Chemical Uses:** Portable applications



## Section 10 - Stability and Reactivity

### Stability

Stable

### Conditions to Avoid

Heating, mechanical abuse and electrical abuse.

### Hazardous Decomposition Products

When exposed to fire or extreme heat, cells may emit toxic fumes.

## Section 11: Toxicological Information

Inhalation, skin contact and eye contact are possible when the cell is opened.

Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation

## Section 12 - Ecological Information

When promptly used or disposed the cell does not present environmental hazard.

When disposed, keep away from water, rain and snow.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Dispose of the cells in accordance with approved local, state, and federal requirements. Consult state environmental agency.

## Section 14 - Transport Information

These cells are exempt from dangerous goods. They are considered non-dangerous goods by the international Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA).

Separate cells when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

**Transport Fashion:** By air, by sea, by railway, by highway.



## Section 15 - Regulatory Information

### Law Information

- 《Dangerous Goods Regulation》
- 《Recommendations on the Transport of Dangerous Goods Model Regulations》
- 《International Maritime Dangerous Goods》
- 《Technical Instructions for the Safe Transport of Dangerous Goods》
- 《Classification and code of dangerous goods》
- 《Occupational Safety and Health Act》 (OSHA)
- 《Toxic Substances Control Act》 (TSCA)
- 《Consumer Product Safety Act》 (CPSA)
- 《Federal Environmental Pollution Control Act》 (FEPCA)
- 《The Oil Pollution Act》 (OPA)
- 《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》 (SARA)
- 《Resource Conservation and Recovery Act》 (RCRA)
- 《Safety Drinking Water Act》 (CWA)
- 《California Proposition 65》
- 《Code of Federal Regulations》 (CFR)

In accordance with all Federal, State and Local laws

## Section 16 - Additional Information

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.