



Shenzhen Anbotek Compliance Laboratory Limited

# SDS REPORT

Report No.....: R011610924B

Client.....: Yiyang Corun Battery Co., Ltd.

Address.....: 168# Gaoxin Road Gaoxin District Yiyang City Hunan  
Province

Manufacturer.....: Yiyang Corun Battery Co., Ltd.

Address.....: 168# Gaoxin Road Gaoxin District Yiyang City Hunan  
Province

Written by : Lucy zeng  
Approved by : Mark Zhu  
Position : Authorized signatory



Date(s) of Report : 2016-11-01 to 2016-11-04

# SAFETY DATA SHEET

According to HCS-2012 APPENDIX D TO § 1910.1200 (Version: 1.0/EN)

## Section 1. Identification

**(a) Product identifier**

Product name: Ni-MH Battery

**(b) Other means of identification**

Product description:

Model: AA2300

Nominal Voltage: 1.2V

Rated Capacity: 2300mAh

Watt-hour: 2.76Wh



**(c) Recommended use of the chemical and restrictions on use**

Recommended use: Ni-MH Battery

Restriction on use: No information available.

**(d) Details of the supplier of the product**

Company name(China): Yiyang Corun Battery Co., Ltd.

Address: 168# Gaoxin Road Gaoxin District Yiyang City Hunan Province

Telephone No.: 0755-6202936

Email: ouyangchunhua@corun.com

## Section 2. Hazard(s) identification


**(a) Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

**(b) GHS Label elements, including precautionary statements**

Emergency Overview

Signal word	Danger	
Hazard Statements		
Causes skin irritation		
Causes serious eye damage		
May cause an allergic skin reaction		
Suspected of causing cancer		
		
<p>This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.</p>		
Appearance Green	Physical State Solid	Odor Odorless

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

Specific treatment (see supplemental first aid instructions on this label)

Get medical advice/attention if you feel unwell

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

**Ingestion**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

No information available.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**(c) Hazards not otherwise classified (HNOC)**

No information available.

**(d) Unknown Toxicity**

10% of the mixture consists of ingredient(s) of unknown toxicity.

**(e) Other information**

No information available.

**(f) Interactions with Other Chemicals**

No information available.

## Section 3. Composition/Information on Ingredients

(a) Mixtures information

Chemical Name	CAS No.	Concentration%
Nickel hydroxide	12054-48-7	21.11
Iron	7439-89-6	19.49
Nickel	7440-02-0	38.72
Manganese	7439-96-5	1.35
Lanthanum	7439-91-0	4.14

Cobalt	7440-48-4	2.38
Potassium hydroxide	1310-58-3	1.87
Polyethylene	9002-88-4	0.53
Cerium	7440-45-1	0.83
Neodymium	7440-00-8	0.88
Aluminum	7429-90-5	0.88
Sodium hydroxide	1310-73-2	1.87
Lithium hydroxide	1310-65-2	0.45
Polytetrafluoroethylene	9002-84-0	0.09
Sodium carboxymethyl cellulose	9004-32-4	0.09
Polypropylene	9003-07-0	2.75
Styrene-Butadiene polymer	9003-55-8	0.45
Cobalt hydroxide	21041-93-0	1.81
Zinc hydroxide	20427-58-1	0.09
Water	7732-18-5	0.22

## Section 4. First-Aid Measures

### (a) Description of first aid measures

**General Advice:** First aid is upon rupture of sealed battery.

**Eye contact:** Show this safety data sheet to the doctor in attendance. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

**Skin contact:** Remove contaminated clothes and rinse the skin with plenty of water. Get medical advice / attention if you feel unwell.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen. Get medical advice / attention if you feel unwell.

**Ingestion:** Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

**Self-protection of the first aider:** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### (b) Most important symptoms/effects, acute and delayed

Contact with internal components may cause allergic skin sensitization (rash) and irritate eyes, skin, nose, throat, respiratory system. Cobalt and Cobalt compounds are considered to be possible human carcinogen(s).

### (c) Immediate medical attention and special treatment

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No information available.

## Section 5. Fire-Fighting Measures

### (a) Extinguishing media

Suitable extinguishing media: Use foam, dry powder or dry sand, CO<sub>2</sub> as appropriate.

Unsuitable extinguishing media: No information available.

### (b) Special hazards arising from the chemical

Under fire conditions, batteries may burst and release hazardous decomposition products when exposed to a fire situation. This could result in the release of flammable or corrosive materials.

Hazardous combustion products: CO, CO<sub>2</sub>, Metal oxides, Irritating fumes.

### (c) Hazardous Combustion Products

Carbon oxides.

### (d) Explosion Data

Sensitivity to Mechanical Impact: No.

Sensitivity to Static Discharge: No.

### (f) Special protective equipment and precautions for fire-fighters

Firefighters must wear fire resistant protective equipment and appropriate breathing apparatus. The staff must equip with filtermask (full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire and the toxic gas. Put out the fire in the upwind direction. Remove the container to the open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment.

## Section 6. Accidental Release Measures

### (a) Personal precautions, protective equipment and emergency procedures

Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### (b) Environmental Precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

### (c) Methods and materials for containment and cleaning up

If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose off according to the local law and rules. Avoid leached substances to get into the earth, canalization or waters. Pick up and transfer to properly labeled containers.

## Section 7. Handling and Storage

### (a) Precautions for safe handling

Always follow the warning information on the batteries and in the manuals of devices. Only use the recommended battery types. Keep batteries away from children. For devices to be used by children, the battery casing should be protected against unauthorized access. Unpacked batteries shall not lie about in bulk. In case of battery change always replace all batteries by new ones of identical type and brand. Do not swallow batteries. Do not throw batteries into water. Do not throw batteries into fire. Avoid deep discharge. Do not short-circuit batteries Use recommended charging time and current.

### (b) Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. It is recommended at -10°C~45°C for 1 month storage, at -10°C~35°C for 3 months storage. Do not storage the Battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.

## Section 8. Exposure Controls/Personal Protection

### (a) Controls parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nickel 7440-02-0	TWA: 1.5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> TWA: 0.015 mg/m <sup>3</sup>
Manganese 7439-96-5	TWA: 0.2 mg/m <sup>3</sup>		TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Cobalt 7440-48-4	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
Aluminum 7429-90-5	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> Al Aluminum	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Potassium hydroxide	Ceiling: 2 mg/m <sup>3</sup>		Ceiling: 2 mg/m <sup>3</sup>





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(o) Partition coefficient: n-octanol/water	Not available.
(p) Auto-ignition temperature	130°C
(q) Decomposition temperature	Not available.
(r) Viscosity	Not available.

## Section 10. Stability and Reactivity

### (a) Reactivity

Stable under recommended storage and handling conditions.

### (b) Chemical stability

Stable under normal conditions.

### (c) Possibility of hazardous reactions

When heated above 150°C the risk of rupture occurs. Due to special safety construction, rupture implies cont release of pressure without ignition.

### (d) Conditions to avoid

Do not subject Nickel-Metal Hydride Rechargeable Battery to mechanical shock. Keep away from open flames, high temperature.

### (e) Incompatible materials

Strong oxidizer, strong acid.

### (f) Hazardous decomposition products

Under fire conditions, the electrode materials can form carcinogenic nickel and cobalt oxides.

## Section 11. Toxicological Information

### (a) Information on the likely routes of exposure

**Inhalation:** Inhalation of a large number of vapors or fumes released due to heat may cause respiratory.

**Ingestion:** Ingestion of battery contents may cause mouth, throat and intestinal burns and damage.

**Skin contact:** Contact with battery electrolyte may cause burns and skin irritation.

**Eye contact:** Contact with battery electrolyte may cause burns. Eye damage is possible.

Under normal conditions (during charge and discharge) release of ingredients does not occur.

If accidental release occurs see information in section 2, and 4. Swallowing of a battery can be harmful. Call the local Poison Control Centre for advice and follow-up.

### (b) Information on toxicological characteristics

**Acute toxicity:** No data available.

**Skin corrosion/irritation:** The liquid in the battery irritates.

**Serious eye damage/irritation:** The liquid in the battery irritates.

**Respiratory sensitization:** The liquid in the battery may cause sensitization to some person.

**skin sensitization:** The liquid in the battery may cause sensitization to some person.

**Carcinogenicity:** No data available.

**Germ Cell Mutagenicity:** No data available.

**Reproductive Toxicity:** No data available.

**STOT-Single Exposure:** No data available.

**STOT-Repeated Exposure:** No data available.

**Aspiration Hazard:** No data available.

**(c) Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization:** No data available.

**Mutagenic Effects:** No data available.

**Carcinogenicity:** No data available.

**Reproductive Toxicity:** No data available.

**Chronic Toxicity:** No data available.

**Target Organ Effects:** No data available.

**Aspiration Hazard:** No data available.

## Section 12. Ecological Information

### (a) Ecotoxicity

Water hazard class 1(Self-assessment): slightly hazardous for water.

### (b) Persistence and Degradability

No information available.

### (c) Bioaccumulative potential

No information available.

### (d) Mobility in soil

No information available.

### (e) Other adverse effects

No information available.

## Section 13. Disposal Considerations

### (a) Safe handling and methods of disposal

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Local regulations may be more stringent than regional or national requirements.

Product disposal recommendation: Observe local, state and federal laws and regulations.

Packaging disposal recommendation: Be aware discarded batteries may cause fire, tape the battery terminals to insulate them. Don't disassembly the battery. Containers may be recycled or re-used. Observe local, state and federal laws and regulations.

The potential effects on the environment and human health of the substances used in batteries and accumulators; the desirability of not disposing of waste batteries and accumulators as unsorted municipal waste and of participating in their separate collection so as to facilitate treatment and recycling.

## Section 14. Transport Information

- (a) Not a hazard material or hazard good for transportation
- (b) Separate nickel metal hydride batteries when shipping to prevent short-circuiting, they should be packed in strong for support during transport, take in a cargo of them without falling, dropping, and breakage
- (c) Prevent collapse or cargo piles and wet by rain, the container must be handled carefully
- (d) Do not give shocks that result in a mark of hitting on a cell
- (e) Please refer to Section 7 - Handling and storage also
- (f) Not regulated for transport : by car, by railway, by road

UN No.	3496	
Name and description	Batteries, nickel-metal hydride	
Class or division	9	
Subsidiary risk	/	
Un packing group	/	
Special provision	A199	
Limited and excepted quantities	7(a)	0
	7(b)	E0
Packing and IBCs	Packing instruction	N/A
	Special packing provisions	/
Portable tanks and bulk containers	Instructions	/
	Special provisions	/

Note:

- (a) Class 9: Miscellaneous dangerous substance and articles, including environmentally hazardous substances
- (b) "0" for each entry not permitted to be transported in accordance with this chapter
- (c) E0: Not permitted as excepted quantity
- (d) A199: Subject to these regulations only when transport by sea

