Report ID: MSIPZ40G6864387U3

MSDS

Sample Name & Model	NI-MH Battery AAA 1.2V
Applicant	SHENZHEN GREPOW BATTERY CO LTD
Address	complex building(1st to 3rd floor), 2nd building (1st to 4th floor), 1st building(1st to 4th floor), Shenzhen Grepow Battery Co., Ltd, Huarong Road, Gaofeng Community, Dalang Street, Longhua Strict, Shenzhen City, Guangdong Province, P.R.China

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Pony Testing International Group

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Material Safety Data Sheet

Reference to ST/SG/AC.10/30/Rev.10 (GHS)

Section 1 - Chemical Product and Company Identification

Chemical Product Identification

Sample Name: NI-MH Battery

Sample Model: AAA 1.2V

Recommended Uses: N/A

Restrictions on Use: N/A

Supplier Name: Hu Nan Grepow New Energy Co., Ltd

Address: West Road East River,Nonferrous Metals Industrial Park(Export Processing Zones), Chenzhou City, Hunan Province, PEOPLE'S REPUBLIC OF CHINA

Phone Number: 18173503116

FAX: 0735-2659160

E-mail: sn@grepow.com

Emergency Phone Number: 18173503116

Section 2 - Hazards Identification

Emergency overview: This product is a battery. Intended use of the product should not result in exposure to the chemical substance. In case of rupture the below hazards exist.

Classification according to GHS

Acute toxicity, oral (4)

Acute toxicity, inhalation:Dusts and mists (4)

Skin corrosion/irritation (1A, 1B, 1C)

Sensitisation, respiratory (1, 1A, 1B)

Sensitisation, skin (1, 1A, 1B)

Carcinogenicity (2)

Specific target organ toxicity, single exposure; Respiratory tract irritation (3)

Specific target organ toxicity, repeated exposure (2)

Hazardous to the aquatic environment, long-term hazard (1)

Label elements

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s):

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H302 Harmful if swallowed
H332 Harmful if inhaled
H314 Causes severe skin burns and eye damage
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 May cause an allergic skin reaction
H351 Suspected of causing cancer
H335 May cause respiratory irritation
H373 May cause damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s):

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dusts or mists.
P264 Wash skin and clothing thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection.

Response:

P330 Rinse mouth.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P363 Wash contaminated clothing before reuse.
P321 Specific treatment(See additional emergency instructions).
P391 Collect spillage.

Storage

P405 Store locked up.

Disposal:

P501 Send contents to approved waste treatment plants.

Other hazards

Physical and chemical hazards: See Section 10
Human health hazards: See Section 11
Environmental hazards: See Section 12

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Section 3 – Composition/Information on Ingredients

Chemical characterization: Mixture

Chemical Composition	CAS No.	EC#	Weight (%)
Nickel Hydroxide	12054-48-7	235-008-5	30.82
Cobalt hydroxide	21041-93-0	244-166-4	1.924
Nickel	7440-02-0	231-111-4	29.797
Lanthanum	7439-91-0	231-099-0	10.858
Cerium	7440-45-1	231-154-9	1.878
Iron	7439-89-6	231-096-4	14.768
Sodium hydroxide	1310-73-2	215-185-5	2.99
Copper	7440-50-8	231-159-6	4.975
Polypropylene	9003-07-0	618-352-4	1.99

Section 4 - First Aid Measures

Description of first aid measures

General information No special measures required.

After eye contact

Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.

After skin contact

Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.

After inhalation

Remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.

After swallowing

Do not induce vomiting. Get medical attention.

Personal protective equipment for first-aid responders: No data available.

Most important symptoms/effects, acute and delayed: No data available.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

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Section 5 - Fire Fighting Measures

Suitable extinguishing media:

Use extinguishing agent suitable for local conditions and the surrounding environment . Such as dry powder , CO_2.

Unsuitable extinguishing media:

No data available.

Specific Hazards arising from the chemical:

Special hazards arising from the substance or mixture

Battery may burst and release hazardous decomposition products when exposed to a fire situation. Some may burn but none ignite readily. Containers may explode when heated. Some may be transported hot.

Specific protective actions for fire-fighters:

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

Section 6 - Accidental Release Measures

Personal precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Protective equipment:

No data available.

Emergency procedures:

Remove ignition sources, evacuate area. Sweep up using a method that does not generate dust. Collect as much of the spilled material as possible, placed the spilled material into a suitable disposal container. Keep spilled material out of sewers, ditches and bodies of water.

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and materials for containment and cleaning up:

For all waste handing must refer to United Nations, National and Local Regulations for disposal.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 - Handling and Storage

Precautions for safe handling:

Avoid short circuiting the battery. Avoid mechanical damage of the battery. Do not open or disassemble. Batteries may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity. Avoid all personal contact, including

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inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well-ventilated place. Keep away from heat, avoiding the long time of sunlight.

Section 8 - Exposure Controls/Personal Protection

Control parameters

CAS No.	ACGIH	NIOSH	OSHA
12054-48-7	N/A	N/A	N/A
21041-93-0	N/A	N/A	N/A
7440-02-0	TLV-TWA 1.5mg/m^3	REL-TWA 0.015mg/m^3	PEL-TWA 1mg/m^3
7439-91-0	N/A	N/A	N/A
7440-45-1	N/A	N/A	N/A
7439-89-6	N/A	N/A	N/A
1310-73-2	N/A	N/A	PEL-TWA 2mg/m^3
7440-50-8	TLV-TWA 0.2mg/m^3 TLV-TWA 1mg/m^3	REL-TWA 1mg/m^3 REL-TWA 0.1mg/m^3	PEL-TWA 0.1mg/m^3 PEL-TWA 1mg/m^3
9003-07-0	N/A	N/A	N/A

Appropriate engineering controls:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Personal Protective Equipment:

Respiratory protection: Wear suitable protective mask. For a large large number of battery leakages, wear chemical protective clothing, including self-contained breathing apparatus.

Hand Protection: Wear appropriate protective gloves to reduce skin contact.

Eye Protection: Wear safety goggles or eye protection combined with respiratory protection.

Skin and Body Protection: Working environment required, wear suitable protective clothing to minimize contact with skin. The type of protective equipment must be according to the concentration and the content of certain hazardous substances in the workplace.

Section 9 - Physical and Chemical Properties

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Information on basic physical and chemical properties	
Colour:	Silver.
Physical State:	Cylindrical.
Odour:	Not available.
pH:	Not available.
Melting point/freezing point:	Not available.
Boiling point or initial boiling point and boiling range:	Not available.
Flash Point:	Not available.
Flammability:	Not available.
Solubility:	Not available.
Lower and upper explosion limit/flammability limit:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Kinematic viscosity:	Not available.
Partition coefficient: n-octanol/water (log value):	Not available.
Vapour pressure:	Not available.
Density and/or relative density:	Not available.
Relative vapour density:	Not available.
Particle characteristics:	Not available.
Other information:	
Voltage	1.2V
Electric capacity	

Section 10 - Stability and Reactivity

Reactivity: No data available.

Chemical stability: Stable.

Possibility of hazardous reactions: No data available.

Conditions to Avoid: Flames, sparks, and other sources of ignition, incompatible materials.

Incompatible materials: Oxidizing agents, acid base.

Hazardous decomposition products: Carbon monoxide, carbon dioxide.

Section 11 - Toxicological Information

Acute Toxicity:

CAS No.	LC50/LD50
12054-48-7	LD50 Rat (oral): 1600mg/kg LC50 Rat (Inhalation: Dusts and mists): 1200mg/m^3

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21041-93-0	No data available.
7440-02-0	LD50 Rat (oral): >9000mg/kg
7439-91-0	No data available.
7440-45-1	No data available.
7439-89-6	No data available.
1310-73-2	LD50 Rat(oral): 140~340mg/kg
7440-50-8	No data available.
9003-07-0	No data available.

Skin corrosion/irritation: No data available.
Serious eye damage/irritation: No data available.
Respiratory or Skin sensitization: No data available.
Germ Cell mutagenicity: No data available.
Carcinogenicity: No data available.
Reproductive toxicity: No data available.
Specific target organ toxicity-Single exposure: No data available.
Specific target organ toxicity-Repeated exposure: No data available.
Aspiration hazard: No data available.
Information on the likely routes of exposure: No data available.
Eye: No data available.
Skin: No data available.
Ingestion: No data available.
Inhalation: No data available.

Section 12 - Ecological Information

Ecological Toxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: No data available.

Section 13 - Disposal Considerations

Disposal methods
Recommendation: Consult state, local or national regulations to ensure proper disposal.
Uncleaned packaging

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Recommendation: Disposal must be made according to official regulations.

Section 14 - Transport Information

UN or ID Number **IATA, IMDG, Model Regulation**	N/A
Proper Shipping Name/Description **IATA, IMDG, Model Regulation**	N/A
Class or Div. (Sub Hazard) **IATA, IMDG, Model Regulation**	Not Subjected for transport of dangerous goods
Packing Group **IATA, IMDG, Model Regulation**	N/A
Hazard Label **IATA, IMDG, Model Regulation**	N/A
Environmental hazards **Marine pollutant:**	No
Special precautions for user	No information available.

Transport information: NI-MH Battery AAA 1.2V 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, International Martine Dangerous Goods Regulations (IMDG) (41-22), IMDG Special Provisions 963, or the<<Recommendations On The Transport Of Dangerous Goods-Model Regulations>> (23rd).

S.P.A199 The UN number UN 3496 is only applicable in sea transport. Nickel-metal hydride batterise or nickel-metal hydride battery-powered devices, equipment or vehicles having the potential of a dangerous evolution of heat are not subject to these Regulations provided they are 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); and

(b) unintentional activation.

Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. When active, these devices must meet defined standards for electro-magnetic radiation to ensure that the operation of the device does not interfere with aircraft systems. The devices must not be capable of emitting disturbing signals (such as buzzing alarms, strobe lights, etc.) during transport. 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.

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Note: Nickel-metal hydride cells or batteries packed with or contained in equipment and nickel-metal hydride button cells. (By sea).

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

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

CAS No.	TSCA	IECSC	DSL/NDSL	EINECS/ ELINCS/ NLP
12054-48-7	Listed	Listed	Listed DSL	Listed
21041-93-0	Listed	Listed	Listed DSL	Listed
7440-02-0	Listed	Listed	Listed DSL	Listed
7439-91-0	Listed	Listed	Listed DSL	Listed
7440-45-1	Listed	Listed	Listed DSL	Listed
7439-89-6	Listed	Listed	Listed DSL	Listed
1310-73-2	Listed	Listed	Listed DSL	Listed
7440-50-8	Listed	Listed	Listed DSL	Listed
9003-07-0	Listed	Listed	Listed DSL	Listed

Section 16 - Other Information

Issue Date: 2024-12-30

Issue Department: Technical department

Modification record:

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

CAS: (Chemical Abstracts Service);

EC: (European Commission);

ACGIH: (American Conference of Governmental Industrial Hygienists);

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NIOSH: (US National Institute for Occupational Safety and Health);
OSHA: (US Occupational Safety and Health);
TLV: (Threshold Limit Value)
TWA: (Time Weighted Average);
STEL: (Short Term Exposure Limit);
PEL: (Permissible Exposure Level);
REL: (Recommended Exposure Limit);
PC-STEL: (Permissible concentration-short time exposure limit);
PC-TWA: (Permissible concentration-time weighted average);
IARC: (International Agency for Research on Cancer);
LC50: (Lethal concentration, 50 percent kill);
LD50: (Lethal dose, 50 percent kill);
EC50: (Median effective concentration);
BCF: (Bioconcentration Factor);
BOD: (Biochemical oxygen demand);
IECSC: (Inventory of Existing Chemical Substances in China);
NOEC: (No observed effect concentration);
NTP: (US National Toxicology Program);
RTECS: (Registry of Toxic Effects of Chemical Substances);
TOC: (Total Organic Carbon);
TSCA: (Toxic Substances Control Act of USA);
DSL: (the Domestic Substances List of Canada);
NDSL: (the Non-domestic Substances List of Canada);
IATA: (International Air Transport Association);
IMDG: (International Maritime Dangerous Goods);
TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations)

Approver: Zheng Chunmei.

End of report

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