

## **Safety Data Sheets (SDS)**

**Supplier:** SHENZHEN GREPOW BATTETRY CO.,LTD

**Address:** Wushigang,Chuangyi Rd.,Longhua Village,Bao An District,Shenzhen,P.R.China

**Description:** Rechargeable Nickel Metal Hydride Battery

**Model /Type:** Nickel Metal Hydride battery

**Manufacturer:** SHENZHEN GREPOW BATTETRY CO.,LTD

**Address:** Wushigang,Chuangyi Rd.,Longhua Village,Bao An District,Shenzhen,P.R.China

**Date :** 15-Apr-2019

**Section 1:**

**IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product Identifier**

Product name: Nickel Metal Hydride Battery

Model: Nickel Metal Hydride battery

**Other means of identification**

Synonyms:none

**Recommended use of the chemical and restrictions on use**

Recommended Use:Used in portabl electronic equipments;

- Do not dismantle, open or shred secondary cells or batteries.
- Do not expose cells or batteries to heat or fire. Avoid storage in direct sunlight.
- Do not short-circuit a cell or a battery. Do not store cells or batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
- Do not remove a cell or battery from its original packaging until required for use.
- Do not subject cells or batteries to mechanical shock.
- In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
- Do not use any charger other than that specifically provided for use with the equipment.
- Observe the plus (+) and minus (-) marks on the cell, battery and equipment and ensure correct use.
- Do not use any cell or battery which is not designed for use with the equipment.
- Do not mix cells of different manufacture, capacity, size or type within a device.
- Battery usage by children should be supervised.
- Seek medical advice immediately if a cell or a battery has been swallowed.
- Always purchase the battery recommended by the device manufacturer for the equipment.
- Keep cells and batteries clean and dry.
- Wipe the cell or battery terminals with a clean dry cloth if they become dirty.
- Secondary cells and batteries need to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
- Do not leave a battery on prolonged charge when not in use.
- After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance.
- Retain the original product literature for future reference.
- Use only the cell or battery in the application for which it was intended.
- When possible, remove the battery from the equipment when not in use.
- Dispose of properly.

**Details of the supplier of the safety data sheet:**

Supplier Name: SHENZHEN GREPOW BATTETRY CO.,LTD

Address: Wushigang,Chuangyi Rd.,Longhua Village,Bao An District,Shenzhen,P.R.China

Telephone number of the supplier: +86-755-27043518

Fax: +86-755-61558171

Postcode:518100

E-mail address: daideai@grepow.cn

**Emergency telephone number**

Company Emergency Phone Number: +86-755-27043518

**Section 2 : HAZARDS IDENTIFICATION**

**Classification**

No harm at the normal use. If contact the Electrolyte in the Nickel Metal Hydride Battery, reference as follows:

**Classification of the substance or mixture**

Classification according to GHS  
Acute Toxicity, Oral(Hazard category 4)  
Acute Toxicity, Dermal(Hazard category 3)  
Skin, irritate(Hazard Category 1B)  
Eye Irritate (Hazard category 1)

**GHS Label elements, including precautionary statements:**



**GHS02**



**GHS05**



**GHS06**

**Signal word: Warning**

**Hazard statement(s):**

**H242:**Heating may cause a fire;  
**H311:** Toxic in contact with skin;  
**H314:**Causes severe skin burns and eye damage;  
**H302:**Harmful if swallowed;

**precautionary statements:**

**Prevention:**

P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P312:Call a Poison center or doctor/physician if you feel unwell.  
P302+P350-IF ON SKIN: Gently wash with plenty of soap and water  
P301+P330+P331-IF SWALLOWED: rise mouth. Do NOT induce vomiting  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:**

None

**Disposal**

**P501:** Dispose of contents/container in accordance with local/national regulations

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other information**

No information available.

**Section. 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

The Nickel Metal Hydride battery is hermetically sealed ; among its components, the following ones could potentially be hazardous upon release.

Product name	Nickel Metal Hydride Battery			
Hazardous components	CAS-No.	EC-No.	Weight %	Classification
Nickel hydroxide	12054-48-7	235-008-5	15-30%	Carcinogenic Category 3 R40 sensitizing R43, Xn R20/22 N R50-53
Metal Hydride Alloy			15-40%	Carcinogenic Category 3 R40 Sensitizing R42/43,
Potassium hydroxide	1310-58-3	215-181-3	3-15%	C R35, Xn R22
Cobalt hydroxide	21041-93-0	244-166-4	2.5-7%	XnR22, sensitizing R42/43

For the full text of the R phrases mentioned in this Section, see Section 15.

**Section 4.: FIRST-AID MEASURES**

**First aid measures**

**General advice**

Show this safety data sheet to the doctor in attendance.

*The information below refers to exposure to the ingredients.*

**Inhalation**

Immediate medical attention is required. Move to fresh air. If symptoms persist, call a physician.

**Skin contact**

Immediate medical attention is required. Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

**Eye contact**

Immediate medical attention is required. Remove contact lenses. Rinse immediately with plenty of water for at least 15 minutes.

**Ingestion**

Immediate medical attention is required. Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Centre immediately.

**Section 5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Dry powder, carbon dioxide (CO2), sand.

**Extinguishing media which must not be used for safety reasons**

Water, water spray.

**Specific hazards**

Risk of receptacle bursting.

**Special protective equipment for firefighters**

In the event of fire, wear self contained breathing apparatus. Wear personal protective equipment.

**Hazardous decomposition products**

Nickel and cobalt compounds.

**Section.6 ACCIDENTAL RELEASE MEASURES**

*The information below refers to exposure to the ingredients.*

**Personal precautions**

Use personal protective equipment.  
Avoid contact with skin and eyes.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.  
Do not allow material to contaminate ground water system.

**Methods for cleaning up**

Pick up and transfer to properly labelled containers.  
Dispose of in accordance with local regulations.

**Section 7. HANDLING AND STORAGE**

**Handling**

**Technical measures/Precautions**

No special technical protective measures required.  
Do not obstruct safety vent by soldering or welding tabs on the positive top.

**Safe handling advice**

Avoid contact with skin and eyes.  
Use personal protective equipment.

**Storage**

**Technical measures/Storage conditions**

Keep in a dry, cool and well-ventilated place, preferably in the temperature range of +5 to +25°C at 65%(+/-5%) relative humidity.  
Keep away from heat and sources of ignition.  
Ensure battery terminals are protected during storage.

**Section 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Occupational exposure controls**

**Engineering measures**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Not required under normal use.

**The information below refers to exposure to the ingredients.**

**Respiratory protection**

Wear a positive-pressure supplied-air respirator with full facepiece.

**Hand protection**

Neoprene gloves (EN374).

**Eye protection**

Safety glasses with side-shields conforming to EN166.

**Skin and body protection**

Boots, apron, protective suit.

**Hygiene measures**

General industrial hygiene practice.

**Environmental exposure controls**

**The information below refers to exposure to the ingredients**

Prevent product from entering drains.

Do not allow material to contaminate ground water system.

**Section 9. PHYSICAL AND CHEMICAL PROPERTIES**

**General Information**

<b>Form</b>	battery (sealed unit)	<b>Colour</b>	not applicable	<b>Odour</b>	odourless
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**Important Health Safety and Environmental Information**

not applicable

**Section 10. STABILITY AND REACTIVITY**

**Stability**

Stable under normal conditions.

**Hazardous polymerisation**

Hazardous polymerisation does not occur.

**Conditions to avoid**

Keep away from heat and sources of ignition.

**Materials to avoid**

Exposure to moisture.

**Hazardous decomposition products**

Nickel and cobalt compounds.

**Section 11. TOXICOLOGICAL INFORMATION**

**The information below refers to exposure to the ingredients**

**Local effects**

Causes severe burns. Risk of serious damage to eyes. Harmful by inhalation and if swallowed.

**Long term toxicity**

No data available. Avoid repeated exposure.

**Specific effects**

May cause sensitization by inhalation and skin contact.

Limited evidence of a carcinogenic effect.

## Section 12. Ecological Information

If used as directed, and if the integrity of the battery casing and security vent are maintained, the ingredients are not expected to pose a significant risk to the environment.

### Mobility

No data available.

### Persistence and degradability

No data available.

### Ecotoxicity effects

The information below refers to exposure to the ingredients

Nickel hydroxide: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## Section 13. DISPOSAL CONSIDERATIONS

### Waste from residues / unused products

Dispose of in accordance with local regulations. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations. Should not be released into the environment.

### Contaminated packaging

Not applicable.

### Further information

EWC waste disposal No: 200133 - batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries

Never incinerate Ni-MH batteries.

Never dispose Ni-MH batteries as landfill.

Nickel-Metal Hydride batteries - which in some countries may not be subject to collection & recycling and/or disposal requirements – do however contain recyclable materials and GREPOW recommends proper recycling of these batteries whenever possible.

## Section 14. TRANSPORT INFORMATION

The GrePow rechargeable Ni-MH batteries are considered to be "dry cell" batteries and are not subject to dangerous goods regulation for the purpose of transportation by the U.S. Department of Transportation (DOT), the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) or the International Maritime Dangerous Goods regulations (IMDG). The only DOT requirement for shipping Nickel Metal Hydride batteries is Special Provision 130 which states: "Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals)." IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting. The International Maritime Dangerous Goods Code (IMDG) regulate them for ocean transportation under Special provision 304 which says "Batteries, dry, containing corrosive electrolyte which will not flow out of the battery if the battery case is cracked are not subject to the provisions of this Code provided the batteries are securely packed and protected against short-circuits. Examples of such batteries are: alkali-manganese, zinc carbon, nickel metal hydride and nickel-cadmium batteries."

We hereby certify that the consignment is not classified as dangerous goods under the current edition of the IATA Dangerous Goods Regulations A123 under 57<sup>th</sup> Edition and all applicable camer and governmental regulations" .

**Section 15. REGULATORY INFORMATION**

**\*Symbol** C – Corrosive  
N – Dangerous for the environment

**Text of R phrases** **mentioned in Section 2**  
R22 - Harmful if swallowed.  
R20/22 - Harmful by inhalation and if swallowed.  
R35 - Causes severe burns  
R40 - Limited evidence of a carcinogenic effect.  
R42/43 - May cause sensitization by inhalation and skin contact.  
R43 - May cause sensitization by skin contact.  
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Section 16. OTHER INFORMATION**

**S –phrases** S 1/2 - Keep locked up and out of the reach of children.  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S60 - This material and its container must be disposed of as hazardous waste.  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

\*\*\*\*\*End of SDS\*\*\*\*\*