Safety Data Sheets (SDSs)

Client	DongGuan JinHui Battery Technology Co., Ltd.
Add. of Client	LIJIANGWEI INDUSTRIAL AREA, CREEK VILLAGE, DAOJIAO TOWN, DONGGUAN CITY
Description	Ni-MH rechargeable batteries
Model /Type	1.2VB80H
Manufacturer	DongGuan JinHui Battery Technology Co., Ltd.
Add. of Manufacturer	LIJIANGWEI INDUSTRIAL AREA, CREEK VILLAGE, DAOJIAO TOWN, DONGGUAN CITY
Nominal Voltage	1.2V, 80mAh
Date of Receipt	2015-05-23

Laboratory	Shenzhen ZRLK Testing Technology Co., Ltd.	
Address	3F, HengFengYuan Business Building, QunHui Road, Bao'an District, ShenZhen, P.R.C (518101)	
Approved Signatory	Williau. liu	
Inspected by	Bella.Wang	
Censored by	Frank. feng	

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product name: Ni-MH rechargeable batteries

Model: 1.2VB80H

Other means of identification

Synonyms:none

Recommended use of the chemical and restrictions on use

Recommended Use:Used in portabl electronic equipments;

Uses advidsed against: none

Details of the supplier of the safety data sheet:

Supplier Name: DongGuan JinHui Battery Technology Co., Ltd.

Address: LIJIANGWEI INDUSTRIAL AREA, CREEK VILLAGE, DAOJIAO TOWN, DONGGUAN CITY

Telephone number of the supplier: 0086- 0769-88383212

Postcode: 523181

E-mail address: wujiaji1998@163.com

Emergency telephone number

Company Emergency Phone Number: 0086- 0769-88326813

2. HAZARDS IDENTIFICATION

Classification

No harm at the normal use. If contact the Electrolyte in the Ni-MH rechargeable batteries , reference as follows:

Classification of the substance or mixture

Classification according to GHS

Acute Toxicity, Oral(Hazard category 4)

Acute toxicity, inhalation (Hazard category 4)

Acute Toxicity, Dermal(Hazard category 3)

Aquatic Acute 1

Aquatic Chronic 1

Skin, irritate(Cagegory 1B)

Eye Irritate (Hazard category 1)

GHS Label elements, including precautionary statements:



GHS09



GHS08



GHS06



GHS07



GHS02

Signal word: Danger

Hazard statement(s):

H350 May cause cancer

H341 Suspected of causing genetic defects

H361 Suspected of damaging fertility or the unborn child

H330 Fatal if inhaled

H372 Causes damage to organs.

H410 Very toxic to aquatic life with long lasting effects

H400 Very toxic to aquatic life

H302:Harmful if swallowed;

H351 Suspected of causing cancer.

H332 Harmful if inhaled

H314:Causes severe skin burns and eye damage;

H220 Extremely flammable gas

precautionary statements:

Prevention:

P201 Obtain Special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/furne/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P284 [In case of inadequate ventilation] wear respiratory protection.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

- if this is not the intended use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P210 Keep away from heat, hot surfaces,sparks, open flames and other ignition sources. No smoking.

Response:

P308+P313 IF exposed or concerned: Get medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

P312 Call a Poison center or doctor/physician if you feel unwell.

P330 Rinse mouth

P301+P330+P331-IF SWALLOWED: rise mouth. Do NOT induce vomiting

P302+P350-IF ON SKIN: Gently wash with plenty of soap and water

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P377 Leaking gas fire:Do not extinguish, unless leak can be stopped safety;

P381 In case of leakage, eliminate all ignition sources.

Storage:

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403 Store in a well-ventilated place.

Disposal

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

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterixation: Mixtures

Description:

Product: Consisting of the following components.

Common Chemical Name	Concentration (%)	CAS Number	EC No.
Nickel	43.0	7440-02-0	231-111-4
Iron	13.5	7439-89-6	231-096-4
Copper	5.5	7440-50-8	231-159-6
Lanthanum	6.0	7439-91-0	----
Cobalt(II) oxide	5.5	1307-96-6	215-154-6
Carbon	3.0	7440-44-0	----
Cerium	3.0	7440-45-1	231-154-9
Potassium	1.9	7440-09-7	231-119-8
Zinc	1.0	7440-66-6	231-175-3
oxygen	11.5	7782-44-7	231-956-9
hydrogen	2.1	1333-74-0	215-605-7
Polypropylene	2.0	9003-07-0	----
Polyethylene	2.0	9002-88-4	244-334-7

Note: CAS number is Chemical Abstract Service Registry Number.

N/A=Not apply.

4. FIRST-AID MEASURES

First aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin Contact Remove contaminated clothing and shoes. Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Inhalation Move to fresh air. If symptoms persist, call a physician.
Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed
Swallowing Do not induce vomiting. Get medical attention.
Most Important Symptoms/Effects No information available.
Indication of any immediate medical attention and special treatment needed
Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
CO2, dry chemical powder, water spray.
Unsuitable Extinguishing Media:No information available.
Specific Hazards Arising from the Chemical
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide(CO)
Carbon dioxide
Other irritating and toxic gases.
Hazardous Combustion Products
Carbon oxides.
Explosion Data
Sensitivity to Mechanical Impact No
Sensitivity to Static Discharge No
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. For example: Wear self-contained respiratory protective device. Wear suitable protective clothing and eye/face protection.
Special hazards arising from the substance or mixture:
Battery may burst and release hazardus decomposition products when exposed to a fire situation. NiMH batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature(>150℃), When damaged or abused(e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal Precautions Avoid contact with eyes.

Refer to section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Evacuate personnel to safe areas.

Environmental precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning up Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other Non combustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
Wash thoroughly after handling. Use this material with adequate ventilation.
The product is not explosive.

Conditions for safe storage, including any incompatibilities

If the Ni-MH rechargeable batteries is subject to storage for such a long term as more than 3 months, it is recommended to recharge the Ni-MH rechargeable batteries periodically.
3 months: -10℃~+40℃, 45 to 85%RH
And recommended at 0℃~+35℃ for long period storage.
The capacity recovery rate in the delivery state (50% capacity of fully charged) after storage is assumed to be 80% or more.
Do not storage Ni-MH rechargeable batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
Keep out of reach of children.
Do not expose Ni-MH rechargeable batteries to heat or fire. Avoid storage in direct sunlight.
Do not store together with oxidizing and acidic materials**.**
Keep ignition sources away- Do not smoke.
Store in cool, dry and well-ventilated place.

Incompatible Products None known.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7439-89-6 iron	
TLV (USA)	0.02mg/m^3

MAK (Germany)	0.1mg/m^3

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962(11th Cir., 1992).

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection:



Tightly sealed goggles

Body protection:

Protective work clothing.

Skin protection:



Protective gloves

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Form: cylindrical
	Color: Blue
	Odour: Odourless
	Odor Threshold: No information available

Change in condition:	
pH, with indication of the concentration	Not determined.
Melting point/freezing point	Not determined.
Initial boiling point and Boiling range:	Not determined.
Flash Point	Not determined.
Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapor Pressure:	Not determined.
Vapor Density:	Not determined.
relative density:	Not determined.
Solubility in Water:	Not determined.
Solubility in other solvents	Not determined.
n-octanol/water partition coefficient	Not determined.
Auto-ignition temperature	Product is not self-igniting.
Decomposition temperature	Not determined.
Odout threshold	Not determined.
Evaporation rate	Not determined.
Viscosity	Not determined.
Other Information	No further relevant information available.

10. STABILITY AND REACTIVITY

Reactivity: Stable under recommended storage and handling conditions (see section 7, Handling and storage).

Chemical stability: Stable under normal conditions of use, storage and transport.

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

Possibility of Hazardous Reactions: None under normal processing.

Hazardous Polymerization: Hazardous polymerization does not occur.

Conditions to avoid: Strong heating, fire, Incompatible materials.

Incompatible materials: Strong oxidizing agents. Strong acids.Base metals.

Hazardous Decomposition Products: Carbon oxides, Other irritating and toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute toxiciy: No data available.

LD/LC50 values relevant for classification:
Not available.

Skin corrosion/irritation: No irritant effect.

Serious eye damage/irritation: Cause serious eye irritation.

Respiratory or skin sensitization: No sensitizing effects known.

Specific target organ system toxicity: No information available.

CMR effects(carcinogenity, mutagenicity and toxicity for reproduction): No information available.

12. Ecological Information

Toxicity:

Acquatic toxicity:
Avoid release to the environment. - if this is not the intended use.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation: Must not be disposed together with household garbage.

Do not allow product to reach sewage system

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

Land transport

ADR/RID class: Not regulated.

UN-Number:UN3496

Maritime transport

IMDG Class: Class 9.

UN Number: UN3496.

Marine pollutant: No

Air transport

ICAO/IATA Class: Class 9

UN/ID Number: UN3496

Environmental hazards: Not applicable.

Special precautions for user: Not applicable.

Transport/Additional information: Not restricted goods according to the above specifications.

This report applies to by sea, by air and by land;

Ni-MH rechargeable batteries complies with SP A199 the UN Recommendations on the Transport of Dangerous Goods; IATA Dangerous Goods regulations, and applicable U.S. DOT regulations for the safe transport of Ni-MH rechargeable batteries .

The Ni-MH rechargeable batteries according to SP A199 of the 2015 IATA Dangerous Goods regulations 56th Edition may be transported. and applicable U.S. DOT regulations for the safe transport of Ni-MH rechargeable batteries .

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. The materials and pack design shall be chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture.

The Ni-MH rechargeable batteries having the potential of a 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); and

(b) unintentional 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.

The package must be handled with care and that a flammability hazard exists if the package is damaged;

15. REGULATORY INFORMATION

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

EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information

CAS No.	EU (EINECS)	**US (TSCA)**	**Japan (ENCS)**	**Canada (DSL/ NDSL)**	**Austrlia (AICS)**	**Korea (ECL)**	**China (IECSC)**
7440-02-0	Listed	Not listed	Not listed	NDSL	Not listed	Not listed	Not listed
7439-89-6	Listed	Listed	Listed	DSL	Listed	Listed	Listed
7440-50-8	Listed	Listed	Listed	DSL	Listed	Listed	Listed
7439-91-0	Not listed	Listed	Not listed	DSL	Listed	Listed	Listed
1307-96-6	Not listed	Listed	Not listed	DSL	Listed	Listed	Listed
7440-44-0	Listed	Listed	Listed	DSL	Listed	Listed	Listed
7440-45-1	Listed	Not listed	Not listed	Not listed	Not listed	Not listed	Listed
7440-09-7	Listed	Listed	Not listed	NDSL	Not listed	Not listed	Not listed
7440-66-6	Listed	Listed	Listed	DSL	Listed	Listed	Listed

7782-44-7	Listed	Listed	Listed	DSL	Listed	Listed	Listed
1333-74-0	Listed	Listed	Not listed	NDSL	Not listed	Not listed	Not listed
9003-07-0	Listed	Listed	Listed	DSL	Listed	Listed	Listed
9002-88-4	Listed	Listed	Listed	DSL	Listed	Listed	Listed

Chemical safety assessment A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

R20/22: Harmful by inhalation and if swallowed.

R36: Irritating to eyes.

H302: Harmful if swallowed.

H332: Harmful if inhaled.

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