# 材料安全数据表

Material Safety Data Sheet

货物名称: 镍氢蓄电池

Name of Goods: Nickel Metal-Hydric Rechargeable Battery

生 产 厂家: 广州云通锂电池股份有限公司

Manufacture: Wintonic Battery&Magnet Co.,Ltd

地 址: 广州市花都区新华镇新华工业区云 38 号

 $ADDRESS: \ \#38, Yunfeng \ Road, Xinhua Industrial Zone, Huadu$ 

District, Guangzhou, China

广州云通锂电池股份有多公司

Guangzhou Wintonic Battery&N

# 材料安全数据表 Material Safety Data Sheet

1. Identification of the product and supplier(产品信息)			
产品名称 Name of goods	镍氢蓄电池 Nickel Metal-Hydric Rechargeable Battery		
产品型号 Type/Mode	NI-MH SC3000mAh 1.2V		
依据 Inspection according to	联合国《关于危险品货物运输的建议书》 UN"Recommendations on the TRANSPORT OF DANGEROUS GOODS"		
紧急联系电话 Emergency Telephone call	(24H): +86-20-36865508,36865501,36865502, 36865505		

WINTONIC BATTERIAL SAFETY DATA SHEET

#### SECONDARY NICKEL-METAL HYDRIDE SEALED CELLS

The information contained within is provided as a service to our customers and for their information only. The information and recommendations set forth herein are made in good faith and are believed to be accurate at the date compiled. Wintonic makes no warranty expressed or implied.

## 1. Information of Manufacturer

Manufacturer's Name: Guangzhou Wintonic Battery & Magnet Co., Ltd.

Address: No.38Yunfeng Road, Xinhua Indpark, Huadu District, Guangzhou

City, Guangdong province, China

Telephone Number for information: +86-20-36865508/36865501 Fax Number for information: +86-20-36865168/36865503

# 2. Composition/Information on Ingredients

A sealed Nickel-Metal Hydride cell is not hazardous in normal use.

Hazardous Components contained into the cell.:

Chemical Name	Molecular formula	CAS No.	Weight(%)
Nickel	Ni	7440-02-0	53.8
Cobalt	Co	7440-48-4	6
Potassium Hydroxide	КОН	1310-58-3	
Sodium hydroxide	NaOH	8012-01-9	9
Lithium hydroxide monohydrate	LiOH	1310-66-3	9
PP fiber Separator	$C_2H_2)_n$	9003-07-0	8
Lanthanum	La	7439-91-0	
Cerium	Ce	7440-45-1	12.5
Praseodymium	Pr	7440-10-0	13.5
Neodymium	Nd	7440-00-8	
Water	H <sub>2</sub> O	7732-18-5	12.7
PVA	$(C_2H_4O)_n$	9002-89-5	
CMC(Cellulose CM)	N/A	9000-11-7	5
Polyethylene	(C <sub>2</sub> H <sub>4</sub> ) <sub>n</sub>	9002-88-4	3
Polypropylene	$(C_2H_6)_n$	9003-07-0	

#### 3. Health Hazard Data

**Effects of Overexposure** 

<u>Eye effect:</u> Exposure to the electrolyte contained inside the battery may result in severe irritation and chemical burns.

Skin Effect: Contact with electrolyte inside battery may cause serious chemical burns. Contact with nickel may cause dermatitis in some sensitive individuals.

<u>Ingestion:</u> Ingestion of electrolyte may cause chemical burns to throat area and gastro/respiratory tract.

<u>Inhalation:</u> Battery exposed to extreme heat or pressures causes a breach in the cell case, exposure to the constituents may occur. Inhalation of cobalt dusts may result in pulmonary conditions.

# 4. First Aid Measures

In case of electrolyte solution spill precautions must be taken to avoid any contact of human tissues. If it accidentally happens following must be done:

Eye Contact: Flush with plenty of water during at least 15-30 minutes. Get immediate hospital treatment. Consult eye specialist.

<u>Skin Contact:</u> Remove contaminated clothing and flush effected areas with plenty of water. Medical treatment.

<u>Ingestion</u>: If the injured is fully conscious: plenty of drink, preferably milk. Do not induce vomiting. Immediate hospital treatment.

<u>Inhalation:</u> Remove to fresh air. Rinse mouth and nose with water. Medical treatment.

#### 5. Fire and Explosion Hazard Data

#### **Extinguishing Media:**

Carbon Dioxide, Dry Chemical or Foam extinguishers

#### Special Fire Fighting Procedures:

Use self-contained breathing apparatus and full fire-fighting protective clothing.

#### Unusual Fire and Explosion Hazards:

Do not dispose of battery in fire---may explode.

Do not short-circuit battery----may cause burns.

Do not break open cell---may cause leakage of electrolyte.

## 6. Spill Management Procedure

Spill and leaks are unlikely because cells are contained in an hermetically-sealed case. If the battery case is breached, wear protective clothing that is impervious to caustic materials and absorb or pack spill residues in inert material. Dispose in accordance with applicable state and local regulations.

## 7. Handling and Storage

In normal use conditions, no safety rule is specified to handle the cells.

It is recommended to store following WINTONIC batteries specification in order to ensure longer usage:+5 to +25 $^{\circ}$ C in a 65+-5% relative humidity.

## 8. Exposure Controls/Personal Protection

Under normal condition of use and handling no special protection is required for sealed Ni-MH cells.

# 9. Physical Properties

#### **Appearance**

Nickel plated steel cylindrical cell, eventually sleeved. Dimensions and color according specification.

#### Temperature Range

Risk of electrolyte leakage over 100°C

#### Mechanical Resistance

According mechanical tests in IEC 61951-1 Standard.

# 10. Stability and Reactivity

The batteries are stable under normal operating conditions.

Hazardous polymerization will not occur.

Conditions to avoid: heat, open flames, sparks, and moisture

# 11. Toxicological Information

N/A

# 12. Ecological Information

The storage battery is TCLP toxic.

# 13. Disposal Method

Disposed of batteries in accordance with all state and local regulations.

# 14. Transportation Information

Hazard Classification: Class 9

UN Number:3496

#### Packaging Mark:/

#### Packaging:/

Transport Attentions: According to IATA DGR 63<sup>nd</sup> Edition and under the regulation of IATA special provision A199 by air for transportation, assemble articles strictly according to Hazardous Goods Transport Rules of Railway Station, The batteries should be securely packed and protected against short-circuits. Examine whether the package of the containers are integrate and tighten closed before transport. Take in a cargo of them without failing, dropping, and breakage. Prevent collapse of cargo piles and wet by rain. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. When transported by sea, the assemble place should keep away from bedroom and kitchen, and isolated from the engine room, power and fire source. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, don't stop over in the residential area and congested area. Forbid to use wooden, cement for bulk transport.

International Maritime Organization(IMO),IMDG Code: Regulated as "Batteries, nickel-metal hydride, UN3496. Special provision 963: nickel-metal hydride cells or batteries shall be securely packed and protected from short circuit. They are not subject to other provision of this Code provide that they are loaded in cargo transport unit in a total quantity of less than 100kg gross mass. When loaded in a cargo transport unit in a total quantity of 100kg gross mass of more, they are not subject to other provision of this Code except those of 5.4.1,5.4.3 and column (16) of the dangerous goods list in chapter 3.2".

Nothing in the MSDS indicates above.

# 15. Regulatory Information

Law Information

ISO 11014-2009:Safety data sheet for chemical products - Centent and order of sections.Regulation (EC) No 1272/2008:Classification, Labelling and Packaging of Substances and Mixtures. International Air Transport Association(IATA) Dangerous Goods Regulations,60<sup>th</sup> Edition.

The International Maritime Dangerous Goods (IMDG) Code(inc Amdt 39-18).

# 16. Other Information

The data in this Material Safety Data Sheet related only to the specific material designated herein.

Addition information OF **Physical Properties** 

Weight percentage % of each component

Ni(OH) <sub>2</sub>		МН	
component	content	component	content
Ni	>57.5%	La	30~33%
Zn	3±0.3%	Ce	48~50%
Со	1±0.3%	Pr	5~6%
Fe	<0.01%	Nd	15~17%
Cr	<0.01%	Co	10.2±0.2
Pb	<0.001%	Mn	5.20±0.2
Na	<0.05%	Al	1.91±0.1
S	<0.15%	NIBATTE	19.36
		Fe <sup>CO.</sup> L	.15

Liquid and Solid

3. Additional physical state information (PDFE)

Gel

# 4. Appearance Description

The colour is silver without heat shrink tube (pvc)

# 5. ODOR description

Inodorous

# 6. PH Value

13

# 7. Water Solubility

Immiscible in water