

Material Safety Data Sheet Model No.: Batteries, Nickel-Cadmium

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IDENTITY

(As Used on Label and List)

Note: Blank spaces are not permitted if any item is not applicable or no information is available, the space must be marked to indicate that.

Section I - Identification

Manufacturer's Name YiYang Corun Battery Co.,Ltd.	Product Name Batteries, Nickel-Cadmium		
Address(Number, Street, City State and ZiP Code) ChaoYang Development Zone, YiYang city, Hunan province, thina	Emergency telephone Number Telephone Number for information +86) 0737-6202918		
Signature of Preparer(optional)	Date of prepared and revision 1 Jan 2015		

Section II -Hazard(s) Identification

Classification N.A.

Section III - Composition/Information on Ingredients

Hazardous Components:

A) The content of elements are based on homogeneous materials level of NiCd battery:

Eler	nent	Lead	Cadmium	Hexavalent	Mercury	Polybrominated	Polybrominated
				Chromium		Biphenyls	Diphenyls Ethers
				(Cr6+)		(PBBs)	(PBDEs)
Lim	it	<1000	200000	<1000	<1000	<1000	<1000
(mg	/kg)						
CAS	S no.	7439-92-1	7440-43-9	18540-29-9	7439-97-6	59536-65-1	
					<u> </u>		

B) The content of elements are based on total weight of NiCd battery:

Element	Lead	Cadmium	Hexavalent Chromium	Mercury	Polybrominated Biphenyls	Diphenyl Ethers
Limit (mg/kg)	<40	200000	(Cr6+) <5	<5	(PBBs) Nil	(PBDEs) Nil
Element	Ni(OH)2 (Nickel Hydroxide)	30% KOH Solution (Potassium	30% NaOH Solution (Sodium	Non- Hazardous Materials		
Limit (wt%)	<30%	<20%	<20%	<30%		
CAS no.	12054-48-7	1310-58-3	1310-73-2			

High Technology Industry Park, ChaoYang Development Zone, YiYang city, Hunan province, china Telephone: (086) 737 6202918 Website: http://www.corun.com

Fax: (086) 737 6202919

Manufacturer reserves the right to alter or amend the design, model and specification without prior notice.



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Section IV - First Aid Measures

First Aid Procedures

If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately.

If electrolyte comes into contact with eyes, wash with copious amounts of water for fifteen (15) minutes, and contact a physician.

If electrolytes vapors are inhaled, provide fresh air and seek the attention if respiratory irritation develops.

Ventilate the contaminated area.

Section V -Fire-fighting Measures

Flash Point (Method Used)		Ignition Temp	Flammable Limits	LEL	UEL
N.A	A.	N.A.	N.A.	N.A.	N.A.

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture. Fire fighters should wear self-contained breathing apparatus.

Extinguishing Media

Carbon Dioxide, Dry Chemical or Foam Extinguishers

Special Fire Fighting Procedures N.A.

Unusual Fire and Explosion Hazards

Do not dispose of battery in fire – may explode.

Do not short circuit battery – may cause burns.

Section VI - Accidental Release Measures

Steps to be Taken in case Material is Released or Spilled

Batteries that are leakage should be handled with rubber gloves.

Avoid direct contact with electrolyte.

Wear protective clothing and a positive pressure Self-Contained Breathing Apparatus (SCBA).

Section VII – Handling and Storage

Safe handling and storage advice

Batteries should be handled and stored carefully to avoid short circuits.

Do not store in disorderly fashion, or allow metal objects to be mixed with stored batteries.

Never disassemble a battery.

Do not breathe call vapors or touch internal material with bare hands.

Keep batteries between -30 C and 35 C for prolong storage.

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Model No.: Batteries, Nickel-Cadmium **Material Safety Data Sheet** Document Number: KLY-M-0005 Page 3 of 4 Revision: 1.9 Section VII – Exposure Controls / Personal Protection STEP LTEP Occupational **Exposure Limits:** N.A N.A Respiratory Protection (Specify Type): Ventilation Special Local Exhausts Other Mechanical (General) N.A. **Protective Gloves** Eye Protection N.A Other Protective Clothing or Equipment N.A. Work/Hygienic Practices N.A. Section VIII – Physical and Chemical Properties **Boiling Point** Specific Gravity (H2O=1) N.A. Vapor Pressure (mm Hg) N.A. N.A. Melting Point Vapor Density (AIR=1) N.A. **Evaporation Rate** N.A (Butyl Acetate=1) Solubility in Water N.A. Appearance and Odor: Cylindrical Shape. odorless Section X - Stability and Reactivity Stability Unstable Stable Incompatibility (Materials to Avoid) Hazardous Decomposition or Byproducts Hazardous May Occur Conditions to Avoid Polymerization Will Not Occur Section XI - Toxicological Information Route(s) of Inhalation? Skin? Ingestion? Entry

Toxicological information / Health Hazard (Acute and Chronic)

In ease of electrolyte leakage, skin will be itchy when contaminated with electrolyte.

In contact with electrolyte can cause severe irritation and chemical burns.

Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs.

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Section XII - Ecological Information

N.A.

Section XIII - Disposal Considerations

Dispose of batteries according to government regulations

Section XIV - Transportation Information

CORUN batteries are considered to be "Dry cell" batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) and International Maritime Dangerous Goods Regulations (IMDG).

Shipping these batteries is subject to the only requirements by DOT in Special Provisions130 which states: "batteries, dry are not subject to the requirement 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)"

Shipping these batteries is subject to the only requirements by International Civil Aviation Organization(ICAO) and International Air Transport Association(IATA), Special Provision A123 which states: "An electrical battery or battery powered device having the potential of dangerous evolutions of heat that is not prepared so as to prevent 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) is forbidden from transportation." 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 case is cracked are not subject to the provisions of this code provided the batteries are securely packed and protected against short-circuits. As of 1/1/97 IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting"

We hereby certify that the consignment is not classified as dangerous under the current edition of the IATA. Dangerous goods regulations A123 under 56th Edition and all applicable carrier and governmental regulations.

Section XV - Regulatory Information

Special requirement be according to the local regulations.

Section XVI - Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein. Last revision is 1.8, and new revision 1.9 prepared on 1 Jan 2015.

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