

FUJICELL CORPERATION

Material Safety Data Sheet for Alkaline Battery

Create date : January 15.2011

Section I - Information of Manufacturer *FUJICELL CORPERATION*

Manufacturer's Name : <i>Fujicell corperation</i>
Address:1-10-1 Masugata Tama-Ku, Kawasaki City ,Kanagawa 214 0032 Japan
Email : info@fujicell.biz web :www.fujicell.biz

Section II - Hazardous Ingredients / Identity Information

Hazardous Components			
Description	CAS No. CAS	Approximate % of Total Weight	
Lead	7439-92-1	<30x10⁻⁴	Wt%
Mercury	7439-97-6	<1x10⁻⁴	Wt%
Cadmium	7440-43-9	<3x10⁻⁴	Wt%
Manganese Dioxide	1313-13-9	~40	Wt%
Zinc Metal	7440-66-6	~16	Wt%
Potassium hydroxide	1310-58-3	~18	Wt%

Section III - Physical / Chemical Characteristics

Boiling Point: N.A	Specific Gravity(H ₂ O=1): N.A
Vapor Pressure(mm Hg): N.A	Vapor Density (AIR=1): N.A
Solubility in Water: N.A	Melting Point : N.A
Appearance and Odor	Cylindrical Shape, odorless

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): N.A	Flammable Limits : N.A.
LEL: N.A	UEL: N.A
Extinguishing Media: . Carbon Dioxide, Dry Chemical or Foam extinguishers. Do not dispose of battery in fire - may explode. Special Fire Fighting Procedures: N.A. Do not short-circuit battery - may cause burns.	

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Section V - Reactivity Data

Stability : Stable

Incompatibility (Materials to Avoid): Hazardous Decomposition or Byproducts

Polymerization: Will Not Occur

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? N.A; Skin? N.A;

Ingestion? N.A

Health Hazard (Acute and Chronic) / Toxic logical information

- ◆ In case of electrolyte leakage, skin will be itchy when contaminated with electrolyte.
- ◆ In contact with electrolyte can cause severe irritation and chemical burns.

Section VII – 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.

Section VIII– Accidental Release or Spillage

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.

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Section X – 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 touch internal material with bare hands.
- ◆ Keep batteries between -30°C and 35°C.

Section XI – Transportation Information

Transportation Information :

◆ FUJICELL Corporation 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).

The only DOT requirement for shipping these 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).

As of 1/1/2011 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 52nd Edition and all applicable carrier and governmental regulations".

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Section XII – Ecological Information

◆ **Ecological Information** : N.A

Section XIII – Exposure Controls / Person Protection

- ◆ Occupational Exposure Limits: LTEP N.A.
- ◆ Respiratory Protection (Specify Type): N.A.
- ◆ Ventilation Local Exhausts: N.A.
- ◆ Eye Protection: N.A.
- ◆ Other Protective Clothing or Equipment: N.A.
- ◆ Protective Gloves: N.A.

Section XIV – Disposal Method

- ◆ Dispose of batteries according to government regulations.

Section XV –Regulation Information

Regulation 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.
MSD.

Section XVII – Measures for fire extinction

- ◆ 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.