

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**PRODUCT IDENTIFICATION**

LP063450 Prismatic Rechargeable Lithium-Ion Battery

MANUFACTURER

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DATE :

2008-03-10

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2. COMPOSITION INFORMATION

HAZARDOUS INGREDIENTS	%	CAS NUMBER
Metal Oxide (proprietary)	39.9	12190-79-3
Aluminum	17.6	7429-90-5
Graphite (proprietary)	18.7	7740-44-0
Electrolyte (proprietary)	14.9	--
Copper Foil	7.1	7440-50-8
Polyvinylidene Fluoride (PVDF)	0.8	24937-79-9
Nickel	0.4	7440-02-0
Remaining inert materials	0.5	N/A

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY

Skin contact, Skin absorption, Eye contact, Inhalation, and Ingestion : NO

SYMPTOMS OF EXPOSURE

Skin contact

No effect under routine handling and use.

Skin absorption

No effect under routine handling and use.

Eye contact

No effect under routine handling and use.

Inhalation

No effect under routine handling and use.

REPORTED AS CARCINOGEN

Not applicable

4. FIRST AID MEASURES

INHALATION, EYE CONTACT, and SKIN CONTACT : Not a health hazard.

INGESTION

If swallowed, obtain medical attention immediately.

If exposure to internal materials within cell due to damaged outer casing, the following actions are recommended.

INHALATION

Leave area immediately and seek medical attention.

EYE CONTACT

Rinse eyes with water for 15 minutes and seek medical attention.

SKIN CONTACT

Wash area thoroughly with soap and water and seek medical attention.

INGESTION

Drink milk/water and induce vomiting; seek medical attention.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD

Cell is not flammable but internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.

EXTINGUISHING MEDIA

Use extinguishing media suitable for the materials that are burning.

SPECIAL FIREFIGHTING INSTRUCTIONS

If possible, remove cell(s) from fire fighting area. If heated above 120°C, cell(s) can explode/vent.

FIREFIGHTING EQUIPMENT

Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear.

6. ACCIDENTAL RELEASE MEASURES

ON LAND

Place material into suitable containers and call local fire/police department.

IN WATER

If possible, remove from water and call local fire/police department.

7. HANDLING AND STORAGE

HANDLING

No special protective clothing required for handling individual cells.

STORAGE

Store in a cool, dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Keep away from heat and open flame. Store in a cool dry place.

PERSONAL PROTECTION

Respirator: Not required during normal operations. SCBA required in the event of a fire.

Eye/face protection: Not required beyond safety practices of employer.

Gloves: Not required for handling of cells.

Foot protection: Steel toed shoes recommended for large container handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

State	Solid
Odor	N/A
PH	N/A
Vapor pressure	N/A
Vapor density	N/A
Boiling point	N/A
Solubility in water	Insoluble
Specific gravity	N/A
Density	N/A

10. STABILITY AND REACTIVITY

REACTIVITY

None

INCOMPATIBILITIES

None during normal operation. Avoid exposure to heat, open flame, and corrosives.

HAZARDOUS DECOMPOSITION PRODUCTS

None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

CONDITIONS TO AVOID

Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

11. TOXICOLOGICAL INFORMATION

This product does not elicit toxicological properties during routine handling and use.

Sensitization: NO	Teratogenicity: NO	Reproductive toxicity: NO	Acute toxicity: NO
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This product does not contain any kinds of the following substances and halogen-type flame retardants including Chlorine and Bromide type harmful flame retardants which are listed in

Appendix of TCO documents and relevant international ECO requirements:

Polybromated Biphenyls (PBB)
Polybromated Biphenyl Ethers (PBBE)
Polybromated Biphenyl Oxides (PBBO)
Polybromated Diphenylethers (PBDE)
Polychlorinated Biphenyl (PCB)
Polychlorinated Diphenylethers (PCDE)
Tetrabromophenol A (TBBPA)
Asbestos, Antimonytrioxide, Dioxine

None of the following substances will be exposed, leaked, or emitted during transportation, storage or any operation and any temperature condition:

Chlorinated Fluorohydrocarbon (FCKW)
Acrylonitrile
Styrol
Phenol
Benzol
Mercury of greater than 0.0001 wt% for alkaline battery
Mercury of greater than 0.0005 wt% for other battery
Lithium content of greater than 0.5g/battery cell
Cadmium, lead, and other harmful heavy metal

And will comply with the regulation of 49 CFR (DOT regulation), International Air Transport Association (IATA), and Deuche Forschungsgemeinschaft (DFG) regarding concentrations of emitted substances.

This product does not contain mercury and lithium-metal.

Mercury content: <

Lithium-metal content: <

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

12. ECOLOGICAL INFORMATION

Some materials within the cell are bioaccumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

13. DISPOSAL INFORMATION

Recommended methods for safe and environmentally preferred disposal :

Product(waste from residues)

Do not throw out a used battery cell. Recycle it through the recycling company.

Contaminated packaging

Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates, dispose as industrial wastes subject to special control.

RCRA Waste Code: Nonregulated

Dispose of according to all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

In the case of transportation, confirm no leakage and no overspill from a container. Take in a cargo of them without falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handled carefully. Do not give shocks that result in a mark of hitting on a cell. Please refer to Section 7-HANDLING AND STORAGE also.

- Codes and classifications according to international regulations for transport

Air

IATA-DGR : special provision A45

Sea

IMO-IMDG Code : special provision 188

15. REGULATORY INFORMATION

OSHA hazard communication standard (29 CFR 1910.1200)

Hazardous Non-hazardous

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Prepared and Approved By

TianJin Lishen Battery Company

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