



維洋科技股份有限公司

Mobile Energy Technology Co., Ltd

No. 13, Kong 9th Road, 2nd Industrial Park, Linkou District, New TainanTaipei City 24452, Taiwan R.O.C.

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Circuit Module :

HAZARDOUS INGREDIENTS	%	CAS number
Lead	<0.1	7439-92-1
Mercury	0	7439-97-6
Chromium	0	7440-47-3
Cadmium	0	7440-43-9

Plastic Parts :

HAZARDOUS INGREDIENTS	%	CAS number
Lead	<0.1	7439-92-1
Nickel	<0.01	7440-02-0
CFCs	0	75-69-4
Polychlorinated Biphenyls	0	1336-36-3

SECTION 3 HAZARDS AND TOXICITY CLASS

Class name	:	Not applicable for regulated class
Hazard	:	It may cause heat generation or electrolyte leakage if battery terminals contact with other metals. Electrolyte is flammable. In case of electrolyte leakage, move the battery from fire immediately.
Toxicity	:	Vapor generated from burning batteries, may make eyes, skin and throat irritate.

SECTION 4 FIRST-AID MEASURES

The product contains organic electrolyte. In case of electrolyte leakage from the battery, actions described below are required.

Eye contact	:	Flush the eyes with plenty of clean water for at least 15 minutes immediately, without rubbing. Take a medical treatment. If appropriate procedures are not taken, this may cause an eye irritation.
Skin contact	:	Wash the contact areas off immediately with plenty of water and soap. If appropriate procedures are not taken, this may cause sores on the skin.
Inhalation	:	Remove to fresh air immediately. Take a medical treatment.

A battery cell and spilled internal cell materials

• **Ingestion:**

Make the victim vomit. When it is impossible or the feeling is not well after vomiting, seek medical attention.



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SECTION 5 FIRE-FIGHTING MEASURE

- Extinguishing method : Since vapor, generated from burning batteries may make eyes, nose and throat irritate, be sure to extinguish the fire on the windward side. Wear the respiratory protection equipment in some cases.
- Fire extinguishing agent : Plenty of water and alcohol-resistant foam are effective.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Internal cell materials, such as electrolyte leaked from battery cell, are carefully dealt with according to the followings.

● Personal precautions :

Remove leaked materials with protective equipment (protective glasses and protective gloves). Do not inhale the gas as much as possible. Moreover, avoid touching with as much as possible.

● Environmental precautions: Do not throw out into the environment.

● Method of cleaning up: The leaked solid is moved to a container. The leaked place is wiped off with dry cloth.

● Prevention of secondary hazards: Avoid re-scattering. Do not bring the collected materials close to fire.

SECTION 7 HANDLING AND STORAGE

● When packing the batteries, do not allow battery terminals to contact each other, or contact with other metals. Be sure to pack batteries by providing partitions in the packaging box, or in a separate plastic bag so that the single batteries are not mixed together.

● Do not let water penetrate into packaging boxes during their storage and transportation.

● The batteries will be stored at room temperature, charged to about 30–50% of capacity.

Do not store the batteries in places of the high temperature exceeding 35 deg. C or under direct

● sunlight or in front of a stove. Please also avoid the places of high humidity. Be sure not to expose the batteries to condensation, water drop or not to store it under frozen condition.

● Batteries are sure to be packed in such a way as to prevent short circuits under conditions normally encountered in transport.

Please avoid storing the battery in the places where it is exposed to the static electricity so that no

● damage will not be caused to the protection circuit of the battery pack.

SECTION 8 Exposure Control

Acceptable concentration : Not specified in ACGIH.

Facilities : Provide appropriate ventilation system such as local ventilator in the storage place.

Protective clothing : Gas mask for organic gases, safety goggle, safety glove.

SECTION 9 Stability and Reactivity

Since batteries utilize a chemical reaction they are actually considered a chemical product. As such, battery performance will deteriorate over time even if stored for a long period of time without being used. In addition, the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage.

SECTION 10 Toxicological Information

Acute toxicity	:	Oral (rat) LD50 >2g/kg (estimated)
Irritation	:	Irritating to eyes and skin.
Mutagenicity	:	Not specified.
Chronic toxicity	:	Not specified.

SECTION 11 Ecological Information

- In case of the worn-out battery was disposed in land, the cell case may be corroded, and leak electrolyte. But, we have no ecological information.
- Mercury(Hg) and Cadmium(Cd) are neither contained nor used in cell

SECTION 12 Disposal Considerations

- When the battery is worn out, dispose of it under the ordinance of each local government or the law issued by relating government.
- Disposal of the worn-out battery may be subjected to Collection and Recycling Regulation.

SECTION 13 Transport information

Lithium ion batteries containing more than 1.0g/cell and 2.0g/battery pack and also power is more than 20Wh/cell and 100Wh/battery pack of lithium can be treated as "dangerous goods" under the United Nations Recommendations on the Transport of Dangerous Goods, Special Provision 188, provided that packaging is strong and prevent the products from short-circuit.

The Lithium Ion batteries are considered to be "Rechargeable batteries" and meet the requirements of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) Dangerous Goods Regulations (54th Edition, Package instruction 965, 968 section IA, 966, 967, 969 and 970 section I for lithium ion batteries belong to dangerous goods. Special Provision A88, A99, A154, A164, A181, 182, A183, A185 belong to non-dangerous goods.

SECTION 14 REGULATORY INFORMATION

Regulations specifically applicable to the product :

- The transport of the lithium batteries is regulated by the United Nations, "Model Regulations on Transport of Dangerous Goods".
- Lithium batteries are subject to shipping requirements exceptions under 49 CFR 173.185(paragraph c).
- Shipping of Lithium batteries in aircrafts are regulated by the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) requirements in Special Provision "A48".
- Shipping of lithium batteries on sea are regulated the International Maritime Dangerous Goods (IMDG) requirements of UN 3480.
- The internal component (thinly chloride) is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 190.1200.

SECTION 15 SPECIAL PROTECTION INFORMATION

Respiratory Protection	:	Not necessary under normal use.
Ventilation	:	Not necessary under normal use.
Eye Protection	:	Not necessary under normal use.
Protective Gloves	:	Not necessary under normal use.

SECTION 16 OTHER INFORMATION

Manufacturer's Name	:	Mobile Energy Technology Co.,Ltd.
Supplier's Name	:	Mobile Energy Technology Co.,Ltd.
Supplier's Address	:	#13, Kong 9th Road, 2nd Industrial Park, Linkou District, New Taipei City, Taiwan, R.O.C 24452
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Date Prepared	:	2013/06/20