

Safety Data Sheet

According to HCS-2012 APPENDIX D TO §1910.1200

Version: 1.0/EN

Product name: Lithium-Ion Rechargeable Battery Pack

Revision date: 5/09/2013

Printing date: 5/09/2013

1. Identification

(a) Product identifier

Product name: Lithium-Ion Rechargeable Battery Pack

Product model: L13S4E61

(b) Other means of identification

Product description: Voltage: 7.2V Ampere-hour: 5.8Ah Watt-hour: 41.6Wh Content of Equivalent Li: 3.48g

(c) Recommended use of the chemical and restrictions on use

Recommended use: Used for bluetooth headset, bluetooth speakers, cell phones, MID and other portable electronic products.

Restriction on use: No information available.

(d) Details of the supplier of the product

Company name: Sanyo Electric Co., Ltd.

Address: 222-1, Kaminaizen, Sumoto City, Hyogo, Japan

Postcode: 656-8555

E-mail: joho_gijutsu@gg.jp.panasonic.com

Telephone: +81-799-24-4111

Fax: +81-799-23-2879

(e) Emergency phone number

[Weekday] +81-799-23-3931 [Night and holiday] +81-799-24-4131

2. Hazard(s) identification

(a) Classification of the chemical

The battery is considered as an article, and this product is not classified as hazardous.

(b) Label elements

Pictogram(s): No pictogram is used.

Signal word: No signal word is used.

Hazard statements: Not classified.

Precautionary statements: Not classified.

(c) Description of any hazards not otherwise classified

Do not dismantle, open or shred the battery, the ingredients contained within could be harmful.

(d) Ingredient with unknown acute toxicity

No information available.

3. Composition/information on ingredients

(a) Mixtures information: ingredients contained within the battery

Chemical name	CAS No.	Typical concentration
Aluminum	7429-90-5	5%
Copper	7440-50-8	9%
Dimethyl carbonate	616-38-6	7%
Ethylene carbonate	96-49-1	2%
Graphite	7782-42-5	23%
Iron	7439-89-6	12%
Lithium nickel oxide	12031-65-1	36%
Lithium hexafluorophosphate	21324-40-3	2%

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Nickel	7440-02-0	0.5%
Polyethylene	9002-88-4	1.5%
Polyethylene terephthalate	25038-59-9	1%
Polypropylene	9003-07-0	1%

4. First-aid measures

(a) Description of first aid measures

Caution! No effect under routine handling and use. If exposure to internal materials within cell due to damaged outer metal casing, the following actions are recommended.

- Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
- Skin contact: Immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing and shoes before reuse. Get medical aid.
- Eye contact: Rinse cautiously with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Ingestion: Rinse mouth with water. Never give anything through mouth to an unconscious person. Call a POISON Center or doctor if you feel unwell.

(b) Most important symptoms/effects, acute and delayed

No effect under routine handling and use

(c) Immediate medical attention and special treatment

Note to physicians: Treat symptomatically and supportively.

5. Fire-fighting measures

(a) Extinguishing media

Suitable extinguishing media: Use extinguishing media suitable for the materials that are burning.

Unsuitable extinguishing media: Not available.

(b) Special hazards arising from the chemical

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.

(c) Special protective equipment and precautions for fire-fighters

If possible, remove cell(s) from fire fighting area. If heated above 130°C, cell(s) may Swell /explode /vent.

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

6. Accidental release measures

(a) Personal precautions, protective equipment and emergency procedures

Restrict access to area until completion of clean up. Do not touch the spilled material.

Wear adequate personal protective equipment as indicated in section 8.

(b) Methods and materials for containment and cleaning up

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

(a) Precautions for safe handling

No special protective clothing required for handling individual cells. Do not dismantle, open the battery. Do not handling the battery with metalwork. Do not open, disassemble, crush or burn battery. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust. Keep ignition sources away. Do not smoke.

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(b) Conditions for safe storage, including any incompatibilities

Store in a cool, dry place

8. Exposure controls/personal protection

(a) Control parameters

CAS#7440-50-8

NIOSH RE: TWA 1 mg/m³ OSHA PE: TWA 1 mg/m³ The PEL also applies to other copper compounds (as Cu) except copper fume.

CAS#7429-90-5

NIOSH REL: TWA 10 mg/m³ (total); TWA 5 mg/m³ (resp)
OSHA PEL: TWA 15 mg/m³ (total); TWA 5 mg/m³ (resp)

CAS#1333-86-4

NIOSH REL: TWA 3.5 mg/m³ OSHA PEL: TWA 3.5 mg/m³

(b) Appropriate engineering controls

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

(c) Personal protective equipment

Respiratory protection:

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

Hand protection:

Not required for handling of cells.

Eye/face protection:

Not required beyond safety practices of employer.

Skin/body protection:

Not required for handling of cells.

9. Physical and chemical properties

(a) Appearance

Black solid

(b) Odor

Odourless

(c) Odor threshold

Not available.

(d) pH

Not available

(e) Melting point/freezing point

Not available

(f) Initial boiling point and boiling range

Not available

(g) Flash point

Not available

(h) Evaporation rate

Not available.

(i) Flammability

Not available.

(j) Upper/lower flammability or explosive limits

Not available.

(k) Vapor pressure

Not available

(l) Vapor density

Not available

(m) Density

Not available

(n) Water solubility

Not available.

(o) Partition coefficient: n-octanol/water

Not available

(p) Auto-ignition temperature

Not available.

(q) Decomposition temperature

Not available.

(r) Viscosity

Not available

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10. Stability and reactivity

(a) Reactivity

None during normal operating or handling conditions.

(b) Chemical stability

Stable under normal condition.

(c) Possibility of hazardous reactions

No hazardous reactions known.

(d) Conditions to avoid

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

(e) Incompatible materials

Strong oxidizing agents, strong acids, strong bases.

(f) Hazardous decomposition products

None during normal operating conditions.

If cells are opened, hydrogen fluoride and carbon monoxide may be released.

11. Toxicological information

(a) Information on the likely routes of exposure

- Inhalation: No effect under routine handling and use for sealed battery. If battery is broken, inhale fume/dust may cause irritation, chemical burns or lung oedema.
- Ingestion: No effect under routine handling and use for sealed battery. Harmful if swallowed the electrolyte contained inside the battery. Exposure to the electrolyte contained inside the battery may cause severe chemical burn to mouth, esophagus and gastrointestinal system.
- Skin contact: No effect under routine handling and use for sealed battery. Exposure to the electrolyte contained inside the battery may result in chemical burns. Exposure to battery particulate may cause dermatitis.
- Eye contact: No effect under routine handling and use for sealed battery. Exposure to the electrolyte contained inside the battery may result in severe irritation and chemical burns.

(b) Information on toxicological characteristics

This product does not elicit toxicological properties during routine handling and use. If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers

Acute toxicity:	No data available.
Skin corrosion/irritation:	No data available.
Serious eye damage/irritation:	No data available.
Respiratory sensitization:	No data available.
skin sensitization:	No data available.
Carcinogenicity:	No data available.
Germ Cell Mutagenicity:	No data available.
Reproductive Toxicity:	No data available.
STOT-Single Exposure:	No data available.
STOT-Repeated Exposure:	No data available.
Aspiration Hazard:	No data available.

12. Ecological information

(a) Ecotoxicity

No data available.

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(b) Persistence and Degradability

No data available.

(c) Bioaccumulative potential

No data available.

(d) Mobility in soil

No data available.

(e) Other adverse effects

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

13. Disposal considerations

(a) Safe handling and methods of disposal

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

14. Transport information

(a) UN number	3480
(b) UN Proper shipping name	Lithium ion battery
(c) Transport hazard class(es)	Class9
(d) Packing group (if applicable)	IATA DGR 56th edition Packing Instruction 965 Section IB (Packing weight < 10kg)
(e) Marine pollutant (Yes/No)	No
(f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)	No information available.
(g) Special precautions	No information available.

15. Regulatory information

(a) Safety, health and environmental regulations specific for the product in question

CAS No.	USA TSCA	China IECSC	Canada DSL/NDSL
12190-79-3	Listed	Listed	DSL
1073-05-8	Listed	Listed	NDSL
24937-79-9	Listed	Listed	DSL
7782-42-5	Listed	Listed	DSL
7440-50-8	Listed	Listed	DSL
7429-90-5	Listed	Listed	DSL
1333-86-4	Listed	Listed	DSL

Remark: The above-mentioned search results are based on the Non-Confidential Inventory.

16. Other information, including date of preparation or last revision

(a) Preparation and revision information

Date of previous revision: Not applicable.

Date of this revision: 5/09/2013

Revision summary: The first New SDS

(b) Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
OSHA:	The United States Occupational Safety and Health Administration.
TWA:	time-weighted average

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STEL: Short term exposure limit
DOT: US Department Of Transportation)
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association
TSCA: Toxic Substances Control Act, The American chemical inventory.
DSL: Domestic Substances List
IECSC: Inventory of existing chemical substances in China.

(c) Disclaimer

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.

----- End of the SDS -----