



Material Safety Data Sheet

1. Product & Company Identification:

Product	LiPo-Akku
Manufacturer:	Conrad Electronic SE
Model:	LiPo-Akku 3.7V 130mAh
Nominal capacity:	130mAh
Nominal voltage:	3.7V
Address:	Klaus-Conrad-Strasse 1, D-92242 Hirschau
Telephone:	+ 49 9604408833
Date of issue:	21.11.2010

2. Composition /Information on Ingredients:

MATERIAL OR INGREDIENT	CAS No.	In % by Weight
Polymide	2657-87-6	1.67
Nickel	7440-02-0	1.67
Aluminium	7429-90-5	6.67
Copper	7440-50-8	15.67
Graphite	64365-11-3	14.9
Cobalt	7440-48-4	25.77
Lithium Hexafluorophosphate	21324-40-3	20
Polyvinylidene fluoride	24937-29-9	3.33
PET	25038-59-9	5
Ethylene Carbonate	96-49-1	5

3. Hazardous Identification:

Health Hazards (Acute and Chronic)

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

Sign/Symptoms of Exposure

A shorted battery can cause thermal and chemical burns upon contact with the skin. May be a reproductive hazard.



Material Safety Data Sheet

4. First Aid Measures:

Eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

Inhalation

Remove from exposure and move to fresh air immediately. Use oxygen if available.

Ingestion

Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

5. Fire Fighting Measures:

Flash Point: N/A.

Auto-Ignition Temperature: N/A.

Extinguishing Media: Water, CO₂.

Special Fire-Fighting Procedures: Self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Cell may vent when subjected to excessive heat-exposing battery contents.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

6. Accidental Release Measures:

Steps to be Taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

Waste Disposal Method

It is recommended to discharge the battery to the end, handing in the abandoned batteries to related department unified, dispose of the batteries in accordance with approved local, state, and federal requirements. Consult state environmental protection agency and/or federal EPA.



Material Safety Data Sheet

7. Handling & Store:

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.

Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided.

Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

Other Precautions

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

8. Exposure Control/Personal Protection:

Respiratory Protection

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

Ventilation

Not necessary under conditions of normal use.

Protective Gloves

Not necessary under conditions of normal use.

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

9. Physical/Chemical Properties:

Rated Capacity: 130mAh.

Appearance characters: silvery, quadrate, odorless, solid battery.

Chemical uses: Power up for the mobile phone.

10. Stability/Reactivity:

Stability: Stable

Conditions to Avoid: Heating, mechanical abuse and electrical abuse.

Hazardous Decomposition Products: N/A.

Hazardous Polymerization: N/A.

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.



Material Safety Data Sheet

11. Toxicological information:

Inhalation, skin contact and eye contact are possible when the battery is opened.

Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.

12. Ecological information:

When promptly used or disposed the battery does not present environmental hazard. When disposed, keep away from water, rain and snow.

13. Disposal considerations:

Appropriate Method of Disposal of Substance or Preparation

If battery are still fully charged or only partially discharged, they can be considered a reactive hazardous waste because of significant amount of not reaction, or unconsumed lithium remaining in the spent battery. The battery must be neutralized through an approved secondary treatment facility prior to disposal as a hazardous waste. Recycling of battery can be done in authorized facility, through licensed waste carrier.

14. Transport Information:

This Li-ion Battery have passed UN38.3 test and according to the report No.0901193-012a. According to NEW PACKING INSTRUCTION 965 ~ 970 of IATA DGR 50th Edition for transportation.

More information concerning shipping, testing, marking and packaging can be obtained from Label master at <http://www.labelmaster.com>.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

Transport Fashion: By air, by sea, by railway, by road.



Material Safety Data Sheet

15. Regulatory Information:

Law Information

(Dangerous Goods Regulation)

(Recommendations on the Transport of Dangerous Goods Model Regulations)

(International Maritime Dangerous Goods)

(Classification and code of dangerous goods)

OSHA Hazard Communication Standard Status

Toxic Substances Control Act (TSCA) Status

SARA Title III

RCRA

In accordance with all Federal, State and Local laws.

16. Other Information:

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.