Material Safety Data Sheet

This MSDS is authoring based on the data supplied by and identified on behalf of the client.

Sample Name:	Laser Level (Inside Lithium Battery Packing 103450-2P 3.7V 3600mAh 13.32Wh)
Client Name:	Changzhou Liansheng Photoelectric Technology Co.,Ltd.
Client Address:	2nd Floor,Building 6,Hanjiang Road 128,Xinbei
MSDS No.:	202301036E
Issue Date:	January 9, 2023

Signed for and on behalf of
JINHUA XINJIE GHS AND MSDS SERVICES FIRM

David Chen

Approved signator: David Chen

Jinhua XINJIE GHS and MSDS Services Firm
MSDS
Testing Service

Material Safety Data Sheet

1. Chemical Product and Company Identification

Product Identification:

Product Name: Laser Level (Inside Lithium Battery Packing 103450-2P 3.7V 3600mAh 13.32Wh)
Battery information:
Battery type: Rechargeable Li-polymer battery
Battery model: 103450-2P
Battery Voltage: 3.7V
Battery capacity: 3600mAh 13.32Wh
Placement: Contained in equipment

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laser Level
Use advised against: No data available.

Details of the Manufacture or supplier

Supplier: Changzhou Liansheng Photoelectric Technology Co.,Ltd.
Address: 2nd Floor,Building 6,Hanjiang Road 128,Xinbei
Manufacturer: Zhong Shan VP Electronics Technology Co., Ltd
Telephone: +86-13401574000
Website: java@plineasy.com

Emergency telephone number

Emergency Telephone: +86-13401574000

2. Hazards Identification

Classification

As a solid, manufactured article, exposure to hazardous ingredients is not expected with normal use.

Classification of the substance or mixture

GHS Classification:

As article. Not applicable for classification.

Additional Hazards:

Laser Level (Inside Lithium Battery Packing 103450-2P 3.7V 3600mAh 13.32Wh). Battery is considered as sealed non-spillable one. Under normal operating conditions, the materials sealed inside should not be hazardous to people's health.

But when these materials exposed during production or under case broken condition or being extremely heated (fired), they may be hazardous to people's health: Skin contact with electrolyte solution causes severe skin burns and eye damage, and causes damage to organs through prolonged or repeated exposure.

3. Composition/Information on Ingredients

Chemical Characterization

Description: Laser Level (Inside Lithium Battery Packing 103450-2P 3.7V 3600mAh 13.32Wh). The battery is contained in a hermetically-sealed case(Outer shell), designed to withstand temperatures and pressures encountered during normal use. So during normal use, hazardous materials are fully contained inside the battery.

Ingredients	CAS No.	Amount(%w/w)
Lithium Nickel Cobalt Oxide	113066-89-0	25-35%
Graphite	7782-42-5	15-20%
Polyvinylidene Fluoride	24937-79-9	1-5%
Graphite/Acetylene Black	1333-86-4	0. 5-3%
Aluminum	7429-90-5	21-23%
Copper	7440-50-8	10-11%
Ethyl Methyl Carbonate	623-53-0	10-15%
Lithium Hexafluorophosphate	21324-40-3	

4. First-Aid Measures

Measures at accidental release of electrolyte solution

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. If irritation occurs and persists, contact a doctor.

Skin Contact: Wash off with soap and plenty of water. If irritation occurs and persists, contact a doctor.

Inhalation: Move person into fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration. Get medical attention.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention immediately.

Advice to doctor: Treat symptomatically.

5. Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing media: In case of fire where batteries are present, use extinguishing media such as sand, dry ground dolomite, dry chemical, CO2 or flood the area with water. Water may not extinguish burning batteries but will cool the adjacent batteries and control the spread of fire. Burning batteries will burn themselves out.

Special hazards arising from the substance or mixture:

Battery may explode when exposed to fire. In case of fire, the following can be released: Carbon monoxide,

Carbon dioxide, Other irritating and toxic metal oxides gases.

Advice for firefighters:

Firefighters should wear self-contained breathing apparatus and full fire-fighting gear if necessary. Fight fire from a distance or protected area.

Further information:

Avoid contaminated water to release to drains or waterways.

6. Accidental Release Measures

Personal Precautions: ensure enough ventilation.Safety glasses and neoprene or natural rubber gloves should be worn when cleaning up damaged or leaking batteries. Keep unnecessary personnel away from the immediate area.

Precautions to Protect the Environment: Keep away of drains. Do not release into the environment.

Methods for Cleaning Up: Damaged cells batteries that are not hot or venting should be placed in a sealed plastic bag or container. Absorb any spilled liquid with inert material. Dispose of waste as in section 13.

7. Handling and Storage

Handling

Advice on Safe Handling: Recharge in well –ventilated condition. Do not expose battery to extreme heat or fire. Do not disassemble, crush or burn cell or battery. Avoid handling in a way that would cause a short circuit. When battery leaked or broken, do not contact inner materials.

Storage

Requirements for Storage Rooms and Vessels: Keep in a dry and cool place.

Advice on Storage Compatibility: Store batteries at room temperature in dry area away from direct sunlight. Do not store in a manner that would cause the terminals to short circuit. Keep away from fire, sparks and heat. Avoid damage to battery case.

8. Exposure Controls/Personal Protection

Exposure Limits: None established for the finished product.

Engineering Controls: Batteries that have not been damaged do not require any special engineering controls.

Personal Protective Equipment:

Skin Protection: None required for normal use. Use gloves when handling leaking batteries.

Eye Protection: None required for normal use. Wear safety goggles when handling leaking batteries.

Respiration Protection: None required for normal use. If leaked, wear self-absorption filter respirators or air respirator. In case of emergency rescue or evacuation, recommends wearing oxygen respirator.

General safety and hygiene: Use only as directed. None required for normal use.

9. Physical and Chemical Properties

General Information	
Form:	Solid(Plastics cement and metal shell)
Odor:	Odorless
pH:	N/A
Melting Point/Range:	N/A
Boiling Point/Range:	N/A
Percent Volatility:	N/A
Flash Point:	N/A
Density:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Evaporation Rate & Reference:	N/A
Solubility in Water:	Insoluble
Explosion Limits in Air - Upper :	N/A
Explosion Limits in Air - Lower:	N/A

10. Stability and Reactivity

Stability: Stable under recommended storage conditions
Incompatibility (Materials to Avoid): Avoid contact with strong oxides, strong acid and strong alkali materials.
Conditions to Avoid: Moisture, heat, flames and sparks. Do not incinerate.
Hazardous Decomposition and/or Combustion Products: None hazardous decomposition under normal usage.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute Toxicity: No data available.
Serious Eye Damage/Eye Irritation: Electrolyte: cause eye damage.
Skin Corrosion/Irritation: Electrolyte: cause skin burn.
Respiratory or Skin Sensitization: No data available.
Subacute Toxicity: No data available.
Chronic Toxicity: No data available.
Germ Cell Mutagenicity: No data available.
Carcinogenicity: Not listed as a carcinogen by IARC, NTP, US OSHA.

Reproduction Toxicity: No data available..
Specific Target Organ Toxicity - Single Exposure: No data available.
Specific Target Organ Toxicity - Repeated Exposure: Lithium hexafluorophosphate-CAS#21324-40-3: Causes damage to organs (Bone, Teeth) through prolonged or repeated exposure if inhaled.
Aspiration Hazard: No data available.
Potential Acute Health Effects
Skin contact: Exposure to opened battery can cause skin sensitization or skin burn.
Eye contact: If the eyes accidentally touched the opened battery will lead to eye pain or burn.
Ingestion: In the case of a swallowing lithium-ion battery, can cause chemical burns in a short period of time. Seek medical attention as soon as possible. Do not induce vomiting.
Inhalation: Inhalation of the opened battery may stimulate the respiratory tract.

12. Ecological Information

Ecotoxicity: No data available.
Persistence and Degradability: No data available.
Mobility in soil: No data available.
Bioaccumulative potential: No data available.
Environmental Adverse Effects: When properly used or disposed, the batteries do not present environmental hazard. Since some internal materials may be harmful the environment, do not bury or throw out into the environment.

13. Disposal Considerations

Waste Disposal Methods: Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Don't release the waste to environment.

14. Transport Information

If battery meet the required of following items, can be transported by non hazardous goods /Class 9 hazardous goods.

1) US DOT

Lithium ion batteries comply with regulation 49 CFR 173.185 and Special Regulation 188 for transportation and are shipped as non-hazardous goods.

2) IMDG CODE(Amdt. 40-20)

Suggestion according to IMO IMDG Code(2020 edition): The article is not subject to other provisions of IMO IMDG Code according to special provision 188.

United Nations Dangerous Goods Number (UN No.):The product is not dangerous/not regulated.

UN proper shipping name:None

UN Risk Classification:None

Packing Category:None

Packaging label:None

Marine Pollutants (Yes/No):No

Note:

1.Lithium cells and batteries listed in this report were manufactured under the quality management program described in IMDG CODE 2020 EDITION 2.9.4.5.

2.Lithium cells and batteries listed in this report are of the types proved to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3.

The UN38.3 Test Summary No.(s): 812200500111282

3.Lithium cells and batteries are packed in inner packagings that completely enclose the cell or battery and placed in a strong outer packaging.

4.Cells and batteries are properly protected to prevent short circuits.

5.Each package shall be marked with the appropriate lithium battery mark.

2) IATA DGR (64th) (2023 edition)

Suggestion according to IATA DGR 64th edition: The goods meet the requirements in General Requirements and section II of Packaging Instruction 967.

Packaging requirements: The goods are packaged according to the Packaging Instruction 967 section II.

Special precautions for user:

Lithium cells and batteries are packed in inner packagings that completely enclose the cell or battery and placedin a strong outer packaging. Cells and batteries are properly protected to prevent short circuits.

15. Regulatory Information

International Regulations

Safety, health and environmental regulations/legislation specific for the substance or mixture

No information available.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. Other Information

Further Information:

·This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

·This safety data sheet was prepared in accordance with Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Rev.9.

Department Issuing MSDS: Changzhou Liansheng Photoelectric Technology Co.,Ltd.

Issue Date: January 9, 2023

**********End**********