

# SAFETY DATA SHEET

**Report No.:** CMC221207008M01

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**Name of sample:** Li-ion Battery

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**Model:** TY492530P

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**Type:** 3.7V 320mAh 1.184Wh

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**Client:** SHENZHEN LIJIE TIANYUAN TECHNOLOGY CO., LTD.

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**Address:** No.2, 5F, Building 2, Centennial Kitchenware Industrial Park, Huangmabu Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, P.R. China

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**Written:** Meiko Ma      **Approved:** Danny He

**Reviewed:** Dylan Dou

**Date of issue:** 2023.01.01      **Seal of CMC:**



## CMC Testing International (Shenzhen) Co., Ltd.

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## Safety Data Sheet

| Section 1- Identification of the Substance/Preparation and of the Company/Undertaking |  |              |                   |
|---|--|--------------|-------------------|
| (a) Product identifier  |  |              |                   |
| Name of Sample  | Li-ion Battery   | Weight       | 8.1g              |
|   |  | Size (LxWxT) | (34.0x25.0x4.5)mm |
| Model   | TY492530P  |              |                   |
| (b) Other means of identification   |  |              |                   |
| <b>Synonyms:</b>  | None   |              |                   |
| (c) Recommended use of the chemical and restrictions on use                           |  |              |                   |
| <b>Recommended use:</b>   | LITHIUM ION BATTERIES  |              |                   |
| <b>Restriction on use:</b>  | No information available.  |              |                   |
| (d) Details of the supplier of the product  |  |              |                   |
| Manufacturer  | SHENZHEN LIJIE TIANYUAN TECHNOLOGY CO., LTD.   |              |                   |
| Manufacturer's Address  | No.2, 5F, Building 2, Centennial Kitchenware Industrial Park, Huangmabu Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, P.R. China |              |                   |
| Contact Person  | Mr. Zhao   |              |                   |
| E-mail  | zbj6669@163.com  |              |                   |
| Telephone:  | +86-755-61537987   |              |                   |
| Fax:  | +86-755-29652300   |              |                   |
| (e) Emergency phone number  | +86-755-61537987   |              |                   |

| Section 2- Hazards Identification   |                           |
|---|---------------------------|
| <b>(a) Classification</b>   |                           |
| This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery. |                           |
| Acute toxicity - Oral   | Category 4                |
| Acute toxicity - Dermal   | Category 3                |
| Skin corrosion/irritation   | Category 1 Sub-category B |
| Serious eye damage/eye irritation   | Category 1                |

|   |            |
|---|------------|
| Specific target organ toxicity<br>(repeated exposure) | Category 1 |
| Carcinogenicity                                       | Category 2 |
| Skin sensitization                                    | Category 1 |

**(b) GHS Label elements, including precautionary statements**

**Emergency Overview**

**Signal word:** Danger

**Hazard Statements**

Harmful if swallowed

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Suspected of causing cancer

Causes damage to organs through prolonged or repeated exposure



This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance This is a battery. In case of rupture: the above hazards exist.

**Appearance** Silver

**Physical State** Solid

**Odor** Odorless

**Precautionary Statements-  
Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves

**Precautionary Statements-  
Response**

IF EXPOSED OR CONNECTED: Get medical advice/attention. Specific treatment (see supplemental first aid/instruction on this label).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and water before reuse, if skin irritation or rash occurs: get medical advice/attention if feel unwell.  
IF INHALATION: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing

|  |  |
|--|--|
|  | respiratory symptoms: Call a poison center or doctor/physician.<br>IF SWALLOWED: Rinse mouth, do not induce vomiting, call a poison center or doctor/physician if feel unwell. |
| <b>Precautionary Statements-Storage</b>            | Store locked up  |
| <b>Precautionary Statements-Disposal</b>           | Dispose of contents/container to an approved waste disposal plant  |
| <b>(c) Hazards not otherwise classified (HNOC)</b> | Not applicable   |
| <b>(d) Unknown Toxicity</b>                        |  |
| <b>(e) Other information</b>                       | Very toxic to aquatic life with long lasting effects; Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.                                |
| <b>(f) Interactions with Other Chemicals</b>       | No information available.  |

## Section 3- Composition/Information on Ingredients

| Chemical Name                              | CAS Number | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Lithium Cobalt Oxide (LiCoO <sub>2</sub> ) | 12190-79-3 | 37.55    | *            |
| Graphite                                   | 7782-42-5  | 15.5     | *            |
| Copper                                     | 7440-50-8  | 10.88    | *            |
| Aluminum foil                              | 7429-90-5  | 9.21     | *            |
| Polypropylene                              | 9003-07-0  | 1.53     | *            |
| 1,1-Difluoroethylene polymer               | 24937-79-9 | 1.25     | *            |
| Polyethylene                               | 9002-88-4  | 3.15     | *            |
| Styrene-Butadiene polymer                  | 9003-55-8  | 0.97     | *            |
| Carboxymethyl cellulose                    | 9000-11-7  | 0.55     | *            |
| Nickel                                     | 7440-02-0  | 1.09     | *            |
| Phosphate(1-), hexafluoro-, lithium        | 21324-40-3 | 17.5     | *            |
| Nylon                                      | 24937-16-4 | 0.82     | *            |

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4- First Aid Measures

**(a) Description of first aid measures**

|                                     |  |
|-------------------------------------|--|
| General Advice                      | First aid is upon rupture of sealed battery.   |
| Eye contact:                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.  |
| Skin contact:                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. May cause an allergic skin reaction. Remove and isolate contaminated clothing and shoes.  |
| Inhalation:                         | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method, if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get medical attention immediately if symptoms occur. |
| Ingestion:                          | Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.   |
| Self-protection of the first aider: | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).   |

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

|                                      |  |
|--------------------------------------|--|
| Most important symptoms and effects: | Itching. Coughing and/ or wheezing. Burning sensation. |
|--------------------------------------|--|

**(c) Indication of any immediate medical attention and special treatment needed**

|                    |  |
|--------------------|--|
| Notes to Physician | Treat symptomatically. May cause sensitization of susceptible persons. |
|--------------------|--|

Section 5- Fire Fighting Measures

**(a) Extinguishing media**

|                                 |   |
|---------------------------------|---|
| Suitable extinguishing media:   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media: | CAUTION: Use of water spray when fighting fire may be inefficient.                                      |

**(b) Special hazards arising from the chemical**

|  |                |
|--|----------------|
| The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact. |                |
| Hazardous Combustion Products  | Carbon oxides. |

|                |                                   |     |
|----------------|-----------------------------------|-----|
| Explosion Data | Sensitivity to Mechanical Impact: | No. |
|                | Sensitivity to Static Discharge:  | No. |

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

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6- Accidental Release Measures

**(a) Personal precautions, protective equipment and emergency procedures**

|                       |  |
|-----------------------|--|
| Personal Precautions: | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
| Other Information:    | Refer to protective measures listed in Sections 7 and 8.   |

**(b) Environmental Precautions**

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

**(c) Methods and materials for containment and cleaning up**

|                         |   |
|-------------------------|---|
| Methods for Containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers.  |

Section 7- Handling and Storage

**(a) Precautions for safe handling**

|           |  |
|-----------|--|
| Handling: | Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. |
|-----------|--|

**(b) Conditions for safe storage, including any incompatibilities**

|                        |  |
|------------------------|--|
| Storage:               | Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. |
| Incompatible Products: | Acids. Bases. Oxidizing agent.   |

Section 8 - Exposure Controls/Personal Protection

**(a) Control parameters**

| Exposure Guidelines   | ACGIH TLV                   | OSHA PEL | NIOSH IDLH |
|---|-----------------------------|----------|------------|
| Lithium Cobalt Oxide<br>(LiCoO <sub>2</sub> )<br>12190-79-3 | TWA: 0.02 mg/m <sup>3</sup> | -        | -          |



|   |   |   |  |
|---|---|---|--|
| Graphite<br>7782-42-5                             | TWA:1mg/m <sup>3</sup> respirable fraction all forms except graphite fibers | TWA: 15 mg/m <sup>3</sup> total dust synthetic<br>TWA: 5 mg/m <sup>3</sup> respirable fraction Synthetic (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural | IDLH: 1250 mg/m <sup>3</sup><br>TWA: 2.5 mg/m <sup>3</sup> respirable dust   |
| Phosphate(1-), hexafluoro-, lithium<br>21324-40-3 | TWA:2.5mg/m <sup>3</sup> F  | TWA:2.5mg/m <sup>3</sup> F<br>TWA:2.5mg/m <sup>3</sup> dust (vacated)TWA:2.5mg/m <sup>3</sup>   |  |
| Copper<br>7440-50-8                               | TWA:0.2mg/m <sup>3</sup> fume<br>TWA:1mg/m <sup>3</sup> Cu dust and mist    | TWA:0.1mg/m <sup>3</sup> fume<br>TWA:1mg/m <sup>3</sup> dust and mist (vacated) TWA:0.1mg/m <sup>3</sup> Cu dust,fume,mist  | IDLH:100mg/m <sup>3</sup> dust ,fume and mist<br>TWA:1mg/m <sup>3</sup> dust and mist<br>TWA:0.1mg/m <sup>3</sup> fume |
| Aluminum foil<br>7429-90-5                        | TWA:1mg/m <sup>3</sup> respirable fraction                                  | TWA:15mg/m <sup>3</sup> total dust<br>TWA:5mg/m <sup>3</sup> respirable fraction (vacated) TWA:15mg/m <sup>3</sup> total dust (vacated) TWA:5mg/m <sup>3</sup> respirable fraction(vacated)<br>TWA:5mg/m <sup>3</sup> AL Aluminum   | TWA:10mg/m <sup>3</sup> total dust<br>TWA:5mg/m <sup>3</sup> respirable dust   |
| Nickel<br>7440-02-0                               | TWA:1.5mg/m <sup>3</sup>  | TWA:1mg/m <sup>3</sup><br>(vacated) TWA:1 mg/m <sup>3</sup>   | IDLH:10mg/m <sup>3</sup><br>TWA:0.015mg/m <sup>3</sup>   |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

|                           |  |
|---------------------------|--|
| Other Exposure Guidelines | Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters |
|---------------------------|--|

**(b) Appropriate engineering controls**

|                      |  |
|----------------------|--|
| Engineering Measures | Showers<br>Eyewash stations<br>Ventilation systems |
|----------------------|--|

**(c) Individual protection measures, such as personal protective equipment.**

|                           |  |
|---------------------------|--|
| Eye/Face Protection:      | None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield.   |
| Skin and Body Protection: | None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing.   |
| Respiratory Protection    | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |

|                  |  |
|------------------|--|
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use. No information available. |
|------------------|--|

**Section 9- Physical and Chemical Properties**
**(a) Physical State**

|                 |               |                 |                          |
|-----------------|---------------|-----------------|--------------------------|
| Physical state: | Solid         |                 |                          |
| Appearance:     | Silver Cuboid | Odor:           | Odorless                 |
| Color:          | Silver        | Odor Threshold: | No information available |

**(b) Chemical Properties**

| Property                                     | Values             | Remarks/ Method |
|--|--------------------|-----------------|
| pH   | No data available  | None known      |
| Melting point/freezing point                 | No data available  | None known      |
| Initial Boiling Point And Boiling Range      | No data available  | None known      |
| Flash Point                                  | No data available  | None known      |
| Evaporation Rate                             | No data available  | None known      |
| Flammability (Solid, Gas)                    | No data available  | None known      |
| Upper/Lower Flammability Or Explosive Limits | No data available  |                 |
| Vapor Pressure                               | No data available  | None known      |
| Vapor Density                                | No data available  | None known      |
| Relative Density                             | No data available  | None known      |
| Solubility(les)                              | Insoluble in water | None known      |
| Partition Coefficient: N-Octanol/Water       | No data available  | None known      |
| Auto-Ignition Temperature                    | No data available  | None known      |
| Decomposition Temperature                    | No data available  | None known      |
| Kinematic viscosity                          | No data available  | None known      |
| Dynamic viscosity                            | No data available  | None known      |
| Explosive properties                         | No data available  |                 |
| Oxidizing Properties                         | No data available  |                 |

**(c) Other Information**

|                 |                   |
|-----------------|-------------------|
| Softening Point | No data available |
|-----------------|-------------------|



|                            |                   |
|----------------------------|-------------------|
| VOC Content (%)            | No data available |
| Particle Size              | No data available |
| Particle Size Distribution | No data available |

| Section 10 – Stability and Reactivity         |  |
|---|--|
| <b>(a) Reactivity</b>                         | No data available.                           |
| <b>(b) Chemical stability</b>                 | Stable under recommended storage conditions. |
| <b>(c) Possibility of hazardous reactions</b> | None under normal processing.                |
| <b>(d) Hazardous polymerization</b>           | Hazardous polymerization does not occur.     |
| <b>(e) Conditions to avoid</b>                | None known based on information supplied.    |
| <b>(f) Hazardous decomposition products</b>   | Carbon oxides.                               |

| Section 11 – Toxicological Information                  |  |
|---|--|
| <b>(a) Information on the likely routes of exposure</b> |  |
| Product Information                                     | Product does not present an acute toxicity hazard based on known or supplied information. In case of rupture:  |
| Inhalation  | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.   |
| Eye Contact   | Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation.                    |
| Skin Contact  | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts. Harmful in contact with skin.                               |
| Ingestion   | Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed. |

| Component Information |                       |             |                 |
|-----------------------|-----------------------|-------------|-----------------|
| Chemical Name         | Oral LD50             | Dermal LD50 | Inhalation LC50 |
| Graphite<br>7782-42-5 | > 10000 mg/kg ( Rat ) | -           | -               |
| Nickel<br>7440-02-0   | >9000 mg/kg ( Rat )   | -           | -               |

| <b>(b) Information on toxicological effects</b> |   |
|---|---|
| Symptoms  | Erythema (skin redness). May cause redness and tearing of the eyes. Itching. Rashes. Hives. |

**(c) Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|   |  |             |                        |             |
|---|--|-------------|------------------------|-------------|
| Sensitization:  | May cause sensitization of susceptible persons. May cause sensitization by skin contact. |             |                        |             |
| Mutagenic Effects:  | No information available.  |             |                        |             |
| <b>Carcinogenicity:</b>                                     | The table below indicates whether each agency has listed any ingredient as a carcinogen. |             |                        |             |
| <b>Chemical Name</b>  | <b>ACGIH</b>   | <b>IARC</b> | <b>NTP</b>             | <b>OSHA</b> |
| Lithium Cobalt Oxide<br>(LiCoO <sub>2</sub> )<br>12190-79-3 | A3   | Group 2B    |                        | X           |
| Nickel<br>7440-02-0   |  | Group 2B    | Reasonably Anticipated | X           |

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**NTP (National Toxicology Program)**

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

|                          |  |
|--------------------------|--|
| Reproductive Toxicity    | No information available.  |
| STOT - single exposure   | No information available.  |
| STOT - repeated exposure | Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE). |
| Chronic Toxicity         | Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects.  |
| Target Organ Effects     | Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Central Vascular System (CVS).Kidney. Liver. Lungs. Heart.  |
| Aspiration Hazard        | No information available.  |

**(d) Numerical measures of toxicity Product Information**

|  |                  |  |
|--|------------------|--|
| The following values are calculated based on chapter 3.1 of the GHS document | ATEmix (oral):   |  |
|  | ATEmix (dermal): |  |

## Section 12-Ecological Information

**(a) Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

| Chemical Name                            | Toxicity to Algae   | Toxicity to Fish   | Toxicity to Microorganisms | Daphnia Magna (Water Flea)              |
|--|---|--|----------------------------|---|
| Copper<br>7440-50-8                      | 96h EC50: 0.031 - 0.054 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata) | 96h LC50: 0.0068 - 0.0156 mg/L (Pimephales romelas) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.8mg/L (Cyprinus carpio) 96h LC50: = 1.25 mg/L (Lepomis macrochirus) 96h LC50: =0.052 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.2mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas) |                            | 48h EC50: = 0.03 mg/L                   |
| Nickel<br>7440-02-0                      | 72h EC50: = 0.18 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 0.174 - 0.311 mg/L (Pseudokirchneriella subcapitata)          | 96h LC50: > 100 mg/L (Brachydanio rerio) 96h LC50: = 1.3 mg/L (Cyprinus carpio) 96h LC50: = 10.4 mg/L (Cyprinus carpio)  |                            | 48h EC50: > 100 mg/L 48h EC50: = 1 mg/L |
| <b>(b) Persistence and Degradability</b> | No information available.   |  |                            |   |
| <b>(c) Bioaccumulation</b>               | No information available  |  |                            |   |
| <b>(d) Other adverse effects</b>         | No information available.   |  |                            |   |

## Section 13 – Disposal Considerations

**(a) Waste treatment methods**

| Disposal methods:       | This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. |                                       |                        |                        |
|-------------------------|---|---------------------------------------|------------------------|------------------------|
| Contaminated Packaging: | Disposal should be in accordance with applicable regional, national and local laws and regulations.   |                                       |                        |                        |
| Chemical Name           | RCRA  | RCRA - Basis for Listing              | RCRA - D Series Wastes | RCRA - U Series Wastes |
| Nickel<br>7440-02-0     | (hazardous constituent - no waste number)   | Included in waste streams: F006, F039 |                        |                        |

**California Hazardous Waste Codes 141**

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name  | California Hazardous Waste       |
|--|----------------------------------|
| Lithium Cobalt Oxide (LiCoO <sub>2</sub> )<br>12190-79-3 | Toxic                            |
| Copper<br>7440-50-8                                      | Toxic                            |
| Aluminum foil<br>7429-90-5                               | Ignitable powder                 |
| Nickel<br>7440-02-0                                      | Toxic powder<br>Ignitable powder |

**Section 14 – Transport Information**

|   |  |
|---|--|
| <b>(a) UN number</b>  | 3480 & 3481  |
| <b>(b) Proper shipping name</b>   | Lithium ion batteries (limited to a maximum of 30% SoC) or;<br>Lithium ion batteries packed with equipment (including lithium ion polymer batteries) or;<br>Lithium ion batteries contained in equipments (including lithium ion polymer batteries).   |
| <b>(c) Label(s) / Placard Required:</b>   | Miscellaneous<br>Lithium BATT  |
| <b>(d) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises</b> |  |
| <b>ICAO / IATA:</b>   | Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965 Section IB, PI 966 Section II and PI 967 Section II appropriate of IATA DGR 64 <sup>th</sup> (2023 Edition) for transportation. |
| <b>IMDG CODE:</b>   | The batteries are not restricted to IMDG Code 2020 Edition (Amdt 40-20) according to special provision 188.  |
| <b>DOT:</b>   | Other requirements for the US Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations if shipped in compliance with 49 CFR 173.185.   |
| <b>ADR/ ADN:</b>  | The batteries are not subject to the provisions of United Nations Economic Commission for Europe (UNECE) ADR/ADN if they meet the requirements of special provision 188 of Chapter 3.3. Applicable as from 1 January 2021.   |

In addition, to be permitted in transport each lithium cell and battery types must have passed the applicable tests set out in Subsection 38.3 of the UN Manual of Tests and Criteria.

**Section 15 – Regulatory Information**
**(a) International Inventories**

|   |  |
|---|--|
| TSCA:   | Complies.  |
| DSL:  | All components are listed either on the DSL or NDSL. |
| TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  |  |
| DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List |  |

**(b) US Federal Regulations**
**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                              | CAS No     | Weight-% | SARA 313 – Threshold Values % |
|--|------------|----------|-------------------------------|
| Lithium Cobalt Oxide (LiCoO <sub>2</sub> ) | 12190-79-3 | 37.55    | 0.1                           |
| Copper                                     | 7440-50-8  | 10.88    | 1.0                           |
| Aluminum foil                              | 7429-90-5  | 9.21     | 1.0                           |
| Nickel                                     | 7440-02-0  | 1.09     | 0.1                           |

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | No |
| Chronic Health Hazard             | No |
| Fire Hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name       | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Copper<br>7440-50-8 |                             | X                      | X                         |                            |
| Nickel<br>7440-02-0 |                             | X                      | X                         |                            |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name              | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ   |
|----------------------------|--------------------------|------------------------------------|--|
| Copper<br>7440-50-8        | 5000 lb                  |                                    | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |
| Aluminum foil<br>7429-90-5 |                          |                                    |  |
| Nickel<br>7440-02-0        | 100 lb                   |                                    | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ  |



**(c) US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

| Chemical Name      | California Proposition 65 |
|--------------------|---------------------------|
| Nickel - 7440-02-0 | Carcinogen                |

**U.S. State Right-to-Know Regulations**

| Chemical Name   | New Jersey | Massachusetts | Pennsylvania | Rhode Island | Illinois |
|---|------------|---------------|--------------|--------------|----------|
| Lithium Cobalt Oxide<br>(LiCoO <sub>2</sub> )<br>12190-79-3 | X          |               | X            | X            | X        |
| Graphite<br>7782-42-5                                       | X          | X             | X            |              |          |
| Copper<br>7440-50-8   | X          | X             | X            | X            | X        |
| Aluminum foil<br>7429-90-5                                  |            | X             |              | X            |          |
| Nickel<br>7440-02-0   | X          | X             | X            | X            | X        |

**(d) International Regulations**

Mexico

National occupational exposure limits

| Component                  | Carcinogen Status | Exposure Limits   |
|----------------------------|-------------------|---|
| Graphite<br>7782-42-5      |                   | Mexico: TWA= 2 mg/m <sup>3</sup>  |
| Copper<br>7440-50-8        |                   | Mexico: TWA= 1 mg/m <sup>3</sup><br>Mexico: TWA= 0.2 mg/m <sup>3</sup><br>Mexico: STEL= 2 mg/m <sup>3</sup> |
| Aluminum foil<br>7429-90-5 |                   | Mexico: TWA= 10 mg/m <sup>3</sup>   |
| Nickel<br>7440-02-0        |                   | Mexico: TWA= 1 mg/m <sup>3</sup>  |

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

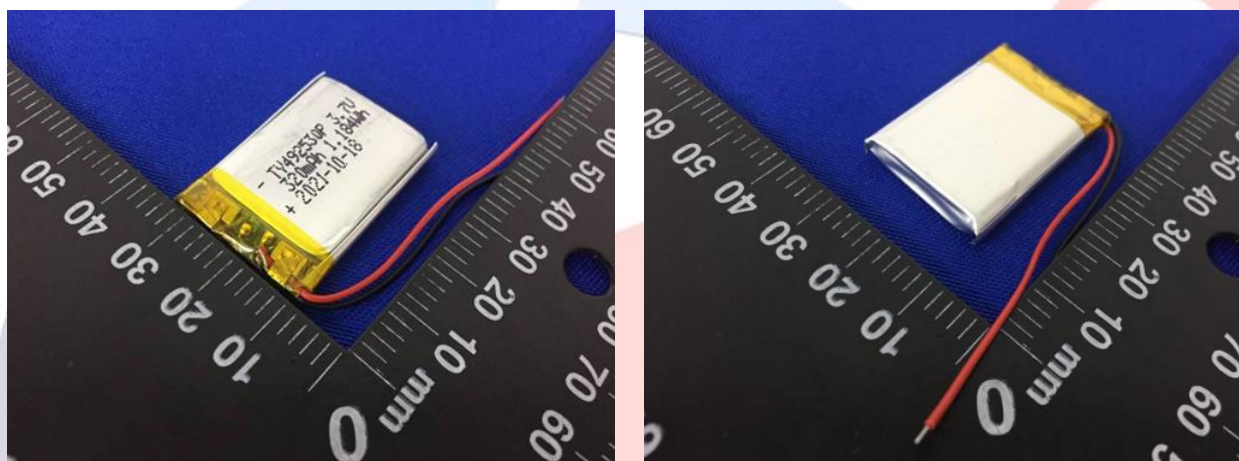
Non-controlled

Section 16 – Additional Information

|             |                       |   |                     |   |                        |   |                                      |   |
|-------------|-----------------------|---|---------------------|---|------------------------|---|--------------------------------------|---|
| <b>NFPA</b> | <b>Health Hazards</b> | 1 | <b>Flammability</b> | 0 | <b>Instability</b>     | 0 | <b>Physical and Chemical Hazards</b> | - |
| <b>HMIS</b> | <b>Health Hazards</b> | 0 | <b>Flammability</b> | 0 | <b>Physical Hazard</b> | 0 | <b>Personal Protection</b>           | X |

Revision Note: No information available

Sample photo:



**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

\*\*\*\*\***End of report**\*\*\*\*\*

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