# SAFETY DATA SHEET

**Date of issue** 8-11-2022 **Canada/English**

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** Rechargeable Li-ion battery pack BRR-2P4S-5200HS

**Other means of identification**

**Recommended use of the chemical and restrictions on use**

**Recommended Use** LITHIUM ION BATTERIES

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Initial supplier identifier** De.power Technology Limited

**Address** NO.16 Hongyun Road，Lanjiang Street，Lanxi County，Jinhua City，Zhejiang Province

**Telephone** 0579-88812088
**E-mail** shenwei@depower.com.cn

**Emergency telephone number**

**Company Emergency Phone Number** 0579-88812088

## 2. HAZARDS IDENTIFICATION

**Classification**

This is a battery. In case of rupture:

| | |
|---|---|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 1 |

**GHS Label elements, including precautionary statements**

**Danger**

**Hazard statements**
This is a battery. In case of rupture:.

Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer

Causes damage to organs through prolonged or repeated exposure



**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection 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

**Precautionary Statements - Response**
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)

**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritat persists: Get medical advice/attention

**Skin**
IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse

**Precautionary Statements - Storage**
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

**Other information**
Very toxic to aquatic life with long lasting effects

**Unknown acute toxicity** 30.9 % of the mixture consists of ingredient(s) of unknown toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance** Not applicable.

**Mixture**

| Chemical name | CAS-No | Percent(%) Max | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|---|---|---|---|---|
| Aluminum | 7429-90-5 | 5% | - | - |
| Cobalt lithium manganese nickel oxide | 182442-95-1 | 45% | | |
| Copper | 7440-50-8 | 7% | | |
| Carbon | 7440-44-0 | 30% | | |
| Ethylene carbonate | 96-49-1 | 3% | | |
| Phosphate(1-),hexafluoro-,lithium | 21324-40-3 | 2% | | |
| Dimethyl carbonate | 616-38-6 | 3% | | |
| Carbonate, methyl ethyl | 623-53-0 | 5% | | |

## 4. FIRST AID MEASURES

**First aid measures**

**General advice** First aid is upon rupture of sealed battery. IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**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.

**Specific hazards arising from the chemical .** No information available

**Hazardous Combustion Products** Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective equipment for** Firefighters should wear self-contained breathing apparatus and full firefighting turnout

**fire-fighters** gear. Use personal protection equipment

## 6. ACCIDENTAL RELEASE MEASURES

**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.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**Methods and material 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.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** In case of rupture: Handle in accordance with good industrial hygiene and safety practice. 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.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Copper<br>7440-50-8 | TWA: 0.2 mg/m$_3$ fume | TWA: 0.1 mg/m$_3$ fume<br>TWA: 1 mg/m$_3$ dust and mist<br>(vacated) TWA: 0.1 mg/m$_3$ Cu<br>dust, fume, mist | IDLH: 100 mg/m$_3$ dust, fume and mist<br>TWA: 1 mg/m$_3$ dust and mist<br>TWA: 0.1 mg/m$_3$ fume |
| Aluminum<br>7429-90-5 | TWA: 1 mg/m$_3$ respirable particulate matter | TWA: 15 mg/m$_3$ total dust<br>TWA: 5 mg/m$_3$ respirable fraction (vacated)<br>TWA: 15 mg/m$_3$ total dust(vacated)<br>TWA: 5 mg/m$_3$<br>respirable fraction | TWA: 10 mg/m$_3$ total dust<br>TWA: 5 mg/m$_3$<br>respirable dust |

| | | | |
|---|---|---|---|
| Phosphate(1-), hexafluoro-, lithium<br>21324-40-3 | TWA: 2.5 mg/m3 F | TWA: 2.5 mg/m3 F<br>(vacated) TWA: 2.5 mg/m3 | IDLH: 250 mg/m3 F |

| Chemical name | Alberta | British Columbia | Ontario TWAEV | Quebec |
|---|---|---|---|---|
| Copper<br>7440-50-8 | TWA: 0.2 mg/m3<br>TWA: 1 mg/m3 | TWA: 1 mg/m3<br>TWA: 0.2 mg/m3 | TWA: 0.2 mg/m3<br>TWA: 1 mg/m3 | TWA: 0.2 mg/m3<br>TWA: 1 mg/m3 |
| Aluminum<br>7429-90-5 | TWA: 10 mg/m3 | TWA: 1.0 mg/m3 | TWA: 1 mg/m3 | TWA: 10 mg/m3 |
| Phosphate(1-), hexafluoro-, lithium<br>21324-40-3 | TWA: 2.5 mg/m3 | TWA: 2.5 mg/m3 | TWA: 2.5 mg/m3 | TWA: 2.5 mg/m3 |

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering controls** Showers
Eyewash stations
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved 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.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

**Physical state** Solid
**Appearance** Orange
**Odor** Odorless
**Color** No information available
**Odor Threshold** Not applicable

| Property | Values | Remarks Method |
|---|---|---|
| **pH** | No data available | None known |
| **Melting / freezing point** | No data available | None known |
| **Boiling point / 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 |
| **Flammability Limit in Air** | | None known |
| **Upper flammability limit** | No data available | |
| **Lower flammability limit** | No data available | |

| | | |
|---|---|---|
| **Vapor pressure** | No data available | None known |
| **Vapor density** | No data available | None known |
| **Relative density** | No data available | None known |
| **Water Solubility** | Insoluble in water | |
| **Solubility(ies)** | No data available | None known |
| **Partition coefficient: n-octanol/water** | 1 | |
| **Autoignition temperature** | No data available | None known |
| **Decomposition temperature** | No data available | |
| **Kinematic viscosity** | No data available | |
| **Dynamic viscosity** | | |

**Other Information**

| | |
|---|---|
| **Explosive properties** | No information available. |
| **Oxidizing properties** | No information available. |
| **Softening Point** | No information available |
| **Molecular Weight** | No information available |
| **VOC Content (%)** | No information available |
| **Liquid Density** | No information available |
| **Bulk Density** | No information available |
| **Particle Size** | No information available |
| **Particle Size Distribution** | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** None known based on information supplied.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous Decomposition Products** Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**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. Causes serious eye irritation. (based on components). Irritating to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Information on toxicological effects**

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing

**Numerical measures of toxicity**

**Acute Toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document** .

**ATEmix (oral)** 12,452.00 mg/kg
**ATEmix (dermal)** 9,132.00 mg/kg

**Unknown acute toxicity** 30.9 % of the mixture consists of ingredient(s) of unknown toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Lithium Cobalt Oxide | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | > 5.05 mg/L ( Rat ) 4 h |
| Copper | - | - | > 5.11 mg/L ( Rat ) 4 h |
| Aluminum | - | - | > 0.888 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Irritating to eyes.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Classification based on data available for ingredients. Contains a known or suspected carcinogen.

**Legend**
**ACGIH (American Conference of Governmental Industrial Hygienists)**
A3 - Animal Carcinogen
**IARC (International Agency for Research on Cancer)**
Group 2B - Possibly Carcinogenic to 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.

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Toxicity to Fish | Toxicity to Microorganism | Crustacea |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Copper foil | 96h EC50: 0.031 - 0.054 mg/L(Pseudokirchneriella subcapitata)<br>72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata) | 96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas)<br>96h LC50: < 0.3 mg/L(Pimephales promelas) | No data available | 48h EC50: = 0.03 mg/L (Daphnia magna) |

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available
.

**Component Information**

**Mobility** No information available.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

**Note:** The transportation of primary lithium cells and batteries is regulated by the International Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule)
Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods" when shipped in accordance with "special provision A45 of IATA-DGR" or "special provision 188 of IMO-IMDG Code"

**TDG** Not regulated

**DOT** NOT REGULATED
- **Proper Shipping Name** NON-REGULATED
- **Hazard Class** N/A
- **Emergency Response Guide Number** 147

**MEX** Not regulated

**ICAO** Not regulated

**IATA**
- **UN-No.** UN3480
- **Proper Shipping Name** LITHIUM ION BATTERIES
- **Hazard Class** 9
- **ERG Code** 12FZ
- **Description** Lithium Battery Mark, Class 9 lithium battery hazard label, Cargo Aircraft Only Label.

**IMDG/IMO** Not regulated
- **Hazard Class** N/A
- **EmS-No.** F-A, S-I

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

## 15. REGULATORY INFORMATION

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

**International Regulations**

**Ozone-depleting substances (ODS)** Not applicable

**Persistent Organic Pollutants** Not applicable

**Export Notification requirements** Not applicable

**International Inventories**

| | |
|---|---|
| **TSCA** | Contact supplier for inventory compliance status. |
| **DSL/NDSL** | Contact supplier for inventory compliance status. |
| **EINECS/ELINCS** | Contact supplier for inventory compliance status. |
| **ENCS** | Contact supplier for inventory compliance status. |
| **KECL** | Contact supplier for inventory compliance status. |
| **PICCS** | Contact supplier for inventory compliance status. |
| **AICS** | Contact supplier for inventory compliance status. |

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazards** 1 | **Flammability** 0 | **Instability** 0 | **Physical and Chemical Properties** - |
| **HMIS** | **Health hazards** 0 | **Flammability** 0 | **Physical hazards** 0 | **Personal Protection** X |

**Prepared By** Shenzhen Precise Testing Technology Co., Ltd.

**Issuing Date** 8-11-2022

**Revision Note** No information available

**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 Safety Data Sheet**

| | |
|---|---|
| Inhalation Statement | dust |
| Not Hazardous | This is a battery. In case of rupture: |
| Hazard statements | Causes damage to organs through prolonged or repeated exposure |
| Signal word | Danger |
| Precautionary Statements | P302 + P352 - IF ON SKIN: Wash with plenty of water and soap P321 - Specific treatment (see supplemental first aid instructions on this label) P332 + P313 - If skin irritation occurs: Get medical advice/attention P362 + P364 - Take off contaminated clothing and wash it before reuse P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P405 - Store locked up P260 - Do not breathe dust/fume/gas/mist/vapors/spray P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P314 - Get medical advice/attention if you feel unwell P501 - Dispose of contents/ container to an approved waste disposal plant |
| Signal word | Danger |
| Skin corrosion/irritation | Category 2 |
| Hazard statements | Causes skin irritation |
| Signal word | Warning |

| | |
|---|---|
| Serious eye damage/eye irritation | Category 2A |
| Hazard statements | Causes serious eye irritation |
| Signal word | Warning |
| Carcinogenicity | Category 2 |
| Hazard statements | Suspected of causing cancer |
| Signal word | Warning |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Skin corrosion/irritation | - (H315) |
| Serious eye damage/eye irritation | - (H319) |
| Carcinogenicity | - (H351) |
| STOT - repeated exposure | - (H372) |
| STOT - repeated exposure | |
| Graphic |  |
| Graphic |  |
| Graphic |  |
| Hazard statements | Causes skin irritation Causes serious eye irritation Suspected of causing cancer Causes damage to organs through prolonged or repeated exposure |
| Hazard statements | H315 - Causes skin irritation H319 - Causes serious eye irritation H351 - Suspected of causing cancer H351 - Suspected of causing cancer H372 - Causes damage to organs through prolonged or repeated exposure H372 - Causes damage to organs through prolonged or repeated exposure |
| Precautionary Statements - EU (§28, 1272/2008) | P103 - Read label before use P280 - Wear face protection P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish P234 - Keep only in original container P303 - IF ON SKIN (or hair): |
| Precautionary Statements | IF ON SKIN: Wash with plenty of water and soap IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention If skin irritation occurs: Get medical advice/attention Take off contaminated clothing And wash it before reuse Take off contaminated clothing and wash it before reuse Take off contaminated clothing And wash it before reuse Take off contaminated clothing and wash it before reuse IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention If eye irritation persists: Get medical advice/attention Obtain special instructions before use Obtain special instructions before use Do not handle until all safety precautions have been read and understood Do not handle until all safety precautions have been read and understood Wear protective gloves Wear protective gloves IF exposed or concerned: Get medical advice/attention IF exposed or concerned: Get medical advice/attention Store locked up Do not breathe dust/fume/gas/mist/vapors/spray Do not breathe dust/fume/gas/mist/vapors/spray Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product Do not eat, drink or smoke when using this product Get medical advice/attention if you feel unwell Get medical advice/attention if you feel unwell |
| Skin | IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse |

| | |
|---|---|
| Precautionary Statements | P302 + P352 - IF ON SKIN: Wash with plenty of water and soap P321 - Specific treatment (see supplemental first aid instructions on this label) P332 + P313 - If skin irritation occurs: Get medical advice/attention P362 + P364 - Take off contaminated clothing and wash it before reuse P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P405 - Store locked up P260 - Do not breathe dust/fume/gas/mist/vapors/spray P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P314 - Get medical advice/attention if you feel unwell P501 - Dispose of contents/ container to an approved waste disposal plant |
| Precautionary Statements - Prevention | Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection 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 |
| Precautionary Statements - Response | IF exposed or concerned: Get medical advice/attention Specific treatment (see supplemental first aid instructions on this label) |
| Eyes | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention |
| Skin | IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse |
| Precautionary Statements - Storage | Store locked up |
| Precautionary Statements - Disposal | Dispose of contents/container to an approved waste disposal plant |
| The following values are calculated based on chapter 3.1 of the GHS document | |
| ATEmix (oral) | 12,452.00 |
| Units | mg/kg |
| ATEmix (dermal) | 9,132.00 |
| Units | mg/kg |
| Contains Carbon black, Phosphate(1-), hexafluoro-, lithium | |
| Unknown acute toxicity | 90.77 % of the mixture consists of component(s) of unknown hazards to the aquatic environment |
| Unknown Acute Aquatic Toxicity | 90.77 |
| Unknown Chronic Aquatic Toxicity | 90.77 |
| Product ATE Oral Status | 1 |
| Product ATE Dermal Status | 1 |
| Product ATE Inhalation - Gas Status | 1 |
| Product ATE Inhalation - Vapor Status | 1 |
| Product ATE Inhalation - Dust/Mist Status | 1 |
| Product Skin Corrosion Status | 1 |
| Product Eye Damage Status | 1 |
| Product Respiratory Sens. Status | 1 |
| Product Skin Sensitization Status | 1 |
| Product Mutagenic Status | 1 |
| Product Carcinogenic Status | 1 |
| Product Reproductive Toxicity Status | 1 |
| Product STOT Single Status | 1 |
| Product STOT Repeated Status | 1 |
| Product Aquatic Toxicity Status | 1 |
| Product Aspiration Toxicity Status | 1 |
| Product Ozone Status | 1 |
| Product and Component Overall Classification Status | 1 |
| STOT - repeated exposure | - (H372) |
| **Unknown acute toxicity** | 30.9 % of the mixture consists of ingredient(s) of unknown toxicity |

30.9 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

30.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

30.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Symbols/Pictograms

Symbols/Pictograms

| | |
|---|---|
| Other hazards | Very toxic to aquatic life with long lasting effects |
| Health hazards | Skull and Crossbones |
| Health hazards | Exclamation mark |
| Inhalation Statement | dust |
| Health hazards | 1 |

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1 Product Identifier

**Name of Product:** Rechargeable Li-ion battery pack

## 1.2 Other means of identification

**Product Models:** BRR-2P4S-5200HD
**Nominal Voltage:** 14.4V
**Nominal capacity:** 4900mAh
**Nominal Power:** 70.56Wh
**Weight:** 437g

## 1.3 Recommended use of the chemical and restriction on use

**Recommended Use: Rechargeable Li-ion Battery**
**Restriction on Use:** No information available

## 1.4 Information Of Supplier:

**Company Name:** Huizhou Desay Battery Co., Ltd.
**Address:** No.15 Zone, Zhongkai Hi-Tech Development Zone, Huizhou, Guangdong, China
**Contact person:** Li Henyun
**Tel: 86-0752-2629810**
**E-mail:** desay_certification@desay.com

## 1.5 Emergency Telephone

**86-0752-2629750**

# 2. Hazard(s) Identification

## 2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| | |
|---|---|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 1 |

## 2.2 Label elements

### 2.2.1 Signal Word Danger

### 2.2.2 Hazard Statements

Causes skin irritation
Causes serious eye damage
Suspected of causing cancer
Causes damage to organs through prolonged or repeated exposure

### 2.2.3 Symbol



This product is an article which contains a chemical substance. Safety information is given for exposure to the article as solid. 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.

## 2.3 Precautionary Statements

### 2.3.1 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.
Contaminated work clothing should not be allowed out of the workplace.
Keep away from flames and hot surface –no smoking.
Do not breath dust/fume/gas/mist/vapors/spray.
Do not eat, drink or smoke when using this product.

### 2.3.2 Precautionary Statements – Response

If exposed or connected: Get medical advice/attention.
Specific treatment(see supplemental first aid/instruction on this label).

**Skin**

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.

**Eye**

If IN EYES: Rinse cautiously with water for several minutes, remove contact lenses, if present and easy to do, Continue rinsing. Call a POISON CENTER or doctor/physician.

**Inhalation**

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.

**Ingestion**

If swallowed: rinse mouth, do not induce vomiting ,Call a poison center or doctor/physician if feel unwell.

### 2.3.3 Precautionary Statements – Storage

Store locked up

### 2.3.4 Precautionary Statements – Disposal

Dispose of contents/container to an approved waste disposal plant.

## 2.4 Hazards not otherwise classified (HNOC)

Not applicable

## 2.5 Unknown Toxicity

40% of the mixture consists of ingredient(s) of unknown toxicity.

## 2.6 Other information

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 2.7 Interactions with other chemicals

No information available.

## 3. Composition/ Information on Ingredients

| Chemical Name | CAS No. | Weigh% |
|---|---|---|
| Aluminium | 7429-90-5 | 5 |
| Lithium Nickel Cobalt Manganese Oxide | 182442-95-1 | 43.5 |
| Copper | 7440-50-8 | 9 |
| Graphite | 7782-42-5 | 30 |
| Ethylene Carbonate | 96-49-1 | 3 |
| Lithium hexafluorophosphate | 21324-40-3 | 2 |
| Dimethyl carbonate | 616-38-6 | 2.5 |
| Ethyl Methyl Carbonate | 623-53-0 | 5 |

## 4. First Aid Measures

### 4.1 General Advice

First aid is upon rupture of sealed battery.

#### 4.1.1 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical attention/advice.

#### 4.1.2 Skin Contact

Wash off immediately with plenty of water and soap for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists.

#### 4.1.3 Inhalation of Vented Gas

Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen.

#### 4.1.4 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.

#### 4.1.5 Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved. Take precaution to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personnel protective equipment as required. Wear personnel protective clothing (see section 8).

### 4.2 Most important symptoms and effects, both acute and delayed

Burning sensation, Itching. Rashes. Hives, Coughing.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician**

Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization of susceptible persons. Treat symptomatically.

## 5. Fire –Fighting Measures

### 5.1 Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, $CO_2$, water spray or regular foam. Move containers from fire area if you can do it without risk.

### 5.2 Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

### 5.3 Specific Hazards Arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Product is or contains a sensitizer.

**Hazardous Combustion products**

Carbon oxides

### 5.4 Explosion Data

**Sensitivity to Mechanical Impact :None.**

**Sensitivity to Static Discharge: None.**

### 5.5 Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/IOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

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.

### 6.2 Environmental Precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

### 6.3 Methods for containment

Prevent further leakage or spillage if safe to do so. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

### 6.4 Methods for cleaning up

Pick up and transfer to properly labeled containers.

## 7. Handling and Storage

### 7.1 Precaution for safe handling

In case of rupture, use personal protection equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

### 7.2 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**

Strong acids. Strong oxidizing agent. Strong bases.

## 8. Exposure Controls/Personal Protection

### 8.1 Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Graphite<br>7782-42-5 | TWA:2mg/m³<br>respirable particulate matter all forms except graphite fibers | TWA: 15 mg/m³ total dust synthetic<br>TWA: 5 mg/m³ respirable fraction synthetic<br>(vacated) TWA: 2.5 mg/m³ respirable dust natural<br>(vacated) TWA: 10 mg/m³ total dust synthetic<br>(vacated) TWA: 5 mg/m³ respirable fraction synthetic<br>TWA: 15 mppcf natural | IDLH: 1250 mg/m³<br>TWA: 2.5 mg/m³ respirable dust |
| Lithium Nickel Cobalt Manganese Oxide<br>182442-95-1 | TWA:0.02mg/m³ | - | - |
| Lithium Hexafluorophosphate<br>21324-40-3 | TWA: 2.5 mg/m3 F | TWA: 2.5 mg/m³ F<br>TWA: 2.5 mg/m³ dust<br>(vacated) TWA: 2.5 mg/m³ | - |

ACGIH TLV: American Conference of Governmental Industrial Hygienists-Threshold Limit Value
OSHA PEL : Occupational Safety and Health Administration-Permissible Exposure Limits
NIOSH IDLH Immediately Dangerous to Life or Health.

**Other Exposure Guidelines:**

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

### 8.2 Appropriate engineering controls

**Engineering Measures:**

Showers、 Eyewash stations、Ventilation systems

### 8.3 Individual protection measures, such as personal protective equipment

**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.

**Eye /face protection:** if splashes are likely to occur: Wear safety glasses with side shields(or goggles). None required for consumer use.

**Skin protection:** Wear protective gloves and protective clothing. Long sleeved clothing. Imperious gloves.

**Hygiene Measure:** 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. 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.

## 9. Physical and Chemical Properties

**Physical State**: Solid

**Color:** Silver

**Odor:** Odorless

**Odor Threshold:** No information available

**pH:** No data available

**Melting/freezing point:** No data available

**Boiling point/boiling range:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability (Solid, gas):** No data available

**Flammability Limit in Air:**

**Upper flammability limit:** No data available

**Lower flammability limit:** No data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Specific Gravity:** No data available

**Solubility:** Insoluble in water

**Partition coefficient:n-octanol/water:** No data available

**Autoignition temperature:** No data available

**Decomposition temperature:** No data available

**Kinematic viscosity:** No data available

**Dynamic viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity:**
No data available

**Chemical stability:**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:**
None under normal processing.

**Hazardous Polymerization:**
Hazardous polymerization does not occur.

**Conditions to avoid:**
Do not subject battery to mechanical shock. Keep away from open flames, high temperature.

**Incompatible materials:**
Strong acids, Strong oxidizing agents. Strong bases.

**Hazardous decomposition products:**
Carbon oxides

## 11. Toxicological Information

### 11.1 Information on likely routes of exposure

**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. Corrosive by inhalation (base on components). Inhalation of corrosion fumes/gases may cause coughing, choking, headache, dizziness and weakness for several hour. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure and increased heart rate. Inhaled corrosion substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

**Eye Contact:**
Specific test data for the substance or mixture is not available. Cause burns. ( based on components). Corrosion to the eyes and may cause severe damage including blindness. Cause serious eye damage. May cause irreversible damage to eyes.

**Skin Contact:**
Specific test data for the substance or mixture is not available. Corrosion (based on components). Cause burns. Toxic in contact with skin. May be absorbed through the skin in harmful amounts.

**Ingestion:**
Specific test data for the substance or mixture is not available. Cause burns. ( based on components). Ingestion cause burns of the upper digestive and respiratory tracts. May cause

severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. 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 7782-42-5 | > 10000mg/kg ( Rat ) | - | - |

## 11.2 Information on toxicological effects

**Symptoms:**
Erythema (skin redness). May cause redness and tearing of eyes. Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/or wheezing.

## 11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization:** May cause sensitization of susceptible person, May cause sensitization by skin contact. May cause sensitization by inhalation.

**Mutagenic Effects:** No information available.

**Carcinogenicity:** the table below whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Lithium Nickel Cobalt Manganese Oxide 182442-95-1 | A3 | Group 2B | | X |

**ACGIH** (American Conference of Governmental Industrial Hygienists)
A3- Animal Carcinogen
**IARC** (International Agency for research on Cancer)
Group 2B- Possibly Carcinogenic to humans
**NTP** (National Toxicology Program) Reasonably Anticipated- reasonably anticipated to be a human Carcinogenic.
**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:** Cause 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:** Prolonged exposure may cause chronic effects. Repeated contact may cause allergic reactions in very susceptible persons. Contain a known or suspected carcinogen.

Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

**Target Organ Effects:** Respiratory system. Eyes. Skin. Gastrointestinal tract(GI). Blood. Central Nervous System(CNS). Kidney. Liver. Lungs. Nasal cavities.

**Aspiration Hazard:** No information available.

### 11.4 Numerical measures of toxicity product information

The following values are calculated based on chapter 3.1 of the GHS document.
ATE mix(oral): 5400 mg/kg

## 12. Ecological Information

**Ecotoxicity :**

| Chemical name | Toxicity to Aglae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---|---|---|---|---|
| - | - | - | - | - |

**Persistence and Degradability:** No information available

**Bioaccumulation:** No information available

**Other adverse effects:** No information available

## 13. Disposal Considerations

### 13.1Waste 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. Should not be released into the environment.

**Contaminated Packaging:**

Dispose of in accordance with federal, state and local regulations.

**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 Nickel Cobalt Manganese Oxide 182442-95-1 | Toxic |

## 14. Transportation Information

The transportation of primary lithium cells and batteries is regulated by the International Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule)
Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods" when shipped in accordance with " PI965-967 section II of IATA-DGR" or "special provision 188 of IMO-IMDG Code"

**DOT:** NOT REGULATED

**Proper Shipping Name:** NON REGULATED

**Emergency Response Guide** Number: 147

**Hazard Class:** N/A

**TDG:** Not regulated

**MEX:** Not regulated

**ICAO:** Not regulated

**IATA:** Not regulated

**Proper Shipping Name:** Not regulated

**Hazard Class:** Not regulated

**IMDG/IMO:** Not regulated

**Proper Shipping Name:** NON REGULATED

**Hazard Class:** N/A

**Ems** No.: F-A, S-1

**RID:** Not regulated

**ADR:** Not regulated

**AND:** Not regulated

## 15. Regulatory information

### 15.1International Inventories

| | |
|---|---|
| TSCA | Complies |
| DSL | All components are listed either on the DSL or NDSL. |

TSCA – United State Toxic Substance Control Act Section 8(b) Inventory
DSL/NDSL – Canadian Domestic Substance List/Non-Domestic Substance List

## 15.2 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 (%) | SARA313-Threshold values(%) |
|---|---|---|---|
| Lithium Nickel Cobalt Manganese Oxide | 182442-95-1 | 35-40 | 0.1 |

## 15.3 SARA 311/312Hazard Categories

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

## 15.4 CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

## 15.5 CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## 15.6 US State Regulations

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|---|---|
| - | Carcinogen |
| - | - |

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

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Rhode Island | IIIinois |
|---|---|---|---|---|---|
| Graphite 7782-42-5 | × | × | × | | |
| Lithium Hexafluorophosphate 21324-40-3 | × | | | | |

## 15.7International Regulations

**Mexico**

National occupational exposure limits

| Chemical Name | Carcinogen Status | Exposure Limits |
|---|---|---|
| Graphite | | Mexico: TWA= 2 mg/m$^3$ |

**Canada**
WHMIS Hazard Class
Non-controlled

## 16. Other Information

**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 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 material used in combination with any other materials or in any process, unless specified in the test.

**Prepared By:** Guangzhou MCM Certification and Testing Co., Ltd.

**Issuing Date:** October 28, 2022

**Revision Date:** October 28, 2022

--- End of SDS ---