Rechargeable Li-ion Battery - GSP103465 4000mAh 3.7V
Safety Data Sheet
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Date of issue: 24/07/2019    Revision date: 24/07/2019    Version: 1.0

SECTION 1: Identification

1.1. Identification
Product form : Article
Trade name : Rechargeable Li-ion Battery - GSP103465 4000mAh 3.7V
Other means of identification
Voltage : 3.7V
Watt-Hour: 14.8Wh
Battery Weight: 140g

1.2. Recommended use and restrictions on use
Main use category : Power supply.
Restrictions on use : No information available.

1.3. Supplier
Supplier : Guangzhou Great Power Energy & Technology Co., Ltd.
Address : No. 912, West Village Segment, Shi Liang Road, Shawan Town, Panyu Guangdong Province, P.R. China
Postal Code : 511483
Phone : 86-020-39196828
E-mail : lcni@greatpower.net

1.4. Emergency telephone number
+86-020-39196828

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's risk of rupture, fire, heat, leakage of internal components, which could cause casualty loss.
In the case of rupture, the following hazards may expose:
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2

2.2. GHS Label elements, including precautionary statements
GHS-US labeling
Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : Causes skin irritation.
Causes serious eye irritation.
Precautionary statements (GHS-US) :
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water/…
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see supplemental first aid instruction on this label)
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
2.3. Other hazards which do not result in classification

This product should not present a health hazard when used under reasonable conditions. If contact with the internal components of the battery may be irritating to skin, eyes and mucous membranes. Fire will produce irritating, corrosive and/or toxic gases.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>(CAS-No.) 7439-89-6</td>
<td>31.1</td>
</tr>
<tr>
<td>Cobalt lithium manganese nickel oxide</td>
<td>(CAS-No.) 182442-95-1</td>
<td>28.4</td>
</tr>
<tr>
<td>Graphite</td>
<td>(CAS-No.) 7782-42-5</td>
<td>17.1</td>
</tr>
<tr>
<td>Copper</td>
<td>(CAS-No.) 7440-50-8</td>
<td>5.7</td>
</tr>
<tr>
<td>Diethyl carbonate</td>
<td>(CAS-No.) 105-58-8</td>
<td>4.7</td>
</tr>
<tr>
<td>Dimethyl carbonate</td>
<td>(CAS-No.) 616-38-6</td>
<td>3.8</td>
</tr>
<tr>
<td>Ethylene carbonate</td>
<td>(CAS-No.) 96-49-1</td>
<td>3.4</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(CAS-No.) 7429-90-5</td>
<td>2.5</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>(CAS-No.) 9003-07-0</td>
<td>2</td>
</tr>
<tr>
<td>Phosphate(1-), hexafluoro-, lithium</td>
<td>(CAS-No.) 21324-40-3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : No hazards which require special first aid measures.

First-aid measures after inhalation : There will be no dangerous during normal use. But breathe in a large number of batteries, or heat released from the gas, it will stimulate the respiratory tract and eyes. Remove to fresh air immediately. Get medical treatment immediately.

First-aid measures after skin contact : There will be no dangerous during normal use. But contacting battery electrolyte, may cause severe irritation or burns.

First-aid measures after eye contact : There will be no dangerous during normal use. But contacting battery electrolyte can burn the eyes. Flush the eyes with plenty of clean water for at least 15 minutes immediately, without rubbing. Get immediate medical treatment. If appropriate procedures are not taken, this may cause eye injury.

First-aid measures after ingestion : Ingestion of internal chemical materials may cause mouth, throat and intestinal irritation and damage. Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : No information available.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : No information available.
Rechargeable Li-ion Battery - GSP103465 4000mAh 3.7V
Safety Data Sheet

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

5.2. Specific hazards arising from the chemical

Fire hazard: Battery can be overheated by an external source or by internal shorting and develop metal hydroxide mist.
Toxic vapor may release in case of fire.
Containers may explode when heated.
Fire fighting water runoff and dilution water may be toxic and corrosive and may cause adverse environmental impacts.
Since vapour, generated from burning batteries may make eyes, nose and throat irritates, be sure to extinguish the fire on the windward side. Wear the respiratory protection equipment in some cases.
Exposure to the ingredients contained within the battery pack could be harmful under some circumstances.

Toxic vapor may release in case of fire.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Evacuate personnel to a safe area. Ensure adequate ventilation, especially in confined areas. Eliminate every possible source of ignition. Move containers from fire area if it can be done without personal risk. Cool tanks/drums with water spray/remove them into safety. Stay upwind/keep distance from source.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: No open flames, no sparks, and no smoking. Avoid contact with skin, eyes and clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures: Stop leak if safe to do so. Evacuate personnel to a safe area. Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage. Move containers from fire area if it can be done without personal risk. Contain large spillage with sand or earth.

Methods for cleaning up: Take up liquid spill into absorbent material. Clean up any spills as soon as possible, using an absorbent material to collect it. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: When packing the batteries, do not allow battery terminals to contact each other, or contact with other metals.
Be sure to pack batteries by providing partitions in the packaging box, or in a separate plastic bag so that the single batteries are not mixed together.
Use strong material for packaging boxes so that they will not be damaged by vibration, impact, dropping and stacking during their transportation.
Do not short-circuit, recharge, deform, throw into fire or disassemble.
Do not mix different type of batteries.
Do not solder directly onto batteries.
Insert the battery correctly in electrical equipment.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool and dry area, but prevent condensation on cell or battery terminals. High temperature may damage the performance of the battery. Protect from physical damage and short circuits. To avoid risk of fire or explosion, keep sparks and other sources of ignition away from the battery. Do not allow metal objects to simultaneously contact both positive and negative terminal of batteries. Do not stack battery directly on another battery. Do not store batteries on electrically conductive surfaces. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>IDLH</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite (7782-42-5)</td>
<td>ACGIH TWA (mg/m³) 2 mg/m³ (all forms except graphite fibers-respirable particulate matter)</td>
<td>OSHA PEL (TWA) (mg/m³) 15 mg/m³ (synthetic-total dust) 5 mg/m³ (synthetic-respirable fraction)</td>
<td>US IDLH (mg/m³) 1250 mg/m³</td>
<td>NIOSH REL (TWA) (mg/m³) 2.5 mg/m³ (natural-respirable dust)</td>
</tr>
<tr>
<td>Phosphate(1-), hexafluoro-, lithium (21324-40-3)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ethylene carbonate (96-49-1)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Diethyl carbonate (105-58-8)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Dimethyl carbonate (616-38-6)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Polypropylene (9003-07-0)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>ACGIH TWA (mg/m³) 0.2 mg/m³ (fume)</td>
<td>OSHA PEL (TWA) (mg/m³) 0.1 mg/m³ (fume) 1 mg/m³ (dust and mist)</td>
<td>US IDLH (mg/m³) 100 mg/m³ (dust, fume and mist)</td>
<td>NIOSH REL (TWA) (mg/m³) 1 mg/m³ (dust and mist) 0.1 mg/m³ (fume)</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>ACGIH</td>
<td>OSHA</td>
<td>IDLH</td>
<td>NIOSH</td>
</tr>
<tr>
<td></td>
<td>ACGIH TWA (mg/m³) 1 mg/m³ (respirable particulate matter)</td>
<td>OSHA PEL (TWA) (mg/m³) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)</td>
<td>US IDLH (mg/m³) 10 mg/m³ (total dust) 5 mg/m³ (respirable dust)</td>
<td>NIOSH REL (TWA) (mg/m³) Not applicable</td>
</tr>
<tr>
<td>Cobalt lithium manganese nickel oxide (182442-95-1)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Remove all sources of ignition.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Under normal condition of use and handling no special protection is required for sealed battery. In the event of battery case breakage, should be wear appropriate safety gloves

Eye protection:
Under normal condition of use and handling no special protection is required for sealed battery. Use appropriate safety glasses when there is the risk of splash

Skin and body protection:
Under normal condition of use and handling no special protection is required for sealed battery. It is recommended to wear appropriate protective clothing when the battery case is broken.

Respiratory protection:
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not an explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with incompatible materials

10.5. Incompatible materials

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral rat</th>
<th>Dermal rabbit</th>
<th>Inhalation rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphate(1-), hexafluoro-, lithium (21324-40-3)</td>
<td>50 - 300 mg/kg</td>
<td>&gt; 5 g/kg</td>
<td>0.05 - 0.5 mg/l/4h</td>
</tr>
<tr>
<td>Ethylene carbonate (96-49-1)</td>
<td>10 g/kg</td>
<td>13 g/kg</td>
<td>140 mg/l/4h</td>
</tr>
<tr>
<td>Dimethyl carbonate (616-38-6)</td>
<td>50 - 300 mg/kg</td>
<td>&gt; 5 g/kg</td>
<td>0.05 - 0.5 mg/l/4h</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>30 g/kg</td>
<td>13 g/kg</td>
<td>140 mg/l/4h</td>
</tr>
<tr>
<td>Cobalt lithium manganese nickel oxide (182442-95-1)</td>
<td>50 - 300 mg/kg</td>
<td>&gt; 5 g/kg</td>
<td>0.05 - 0.5 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Polypropylene (9003-07-0)
IARC group 3 - Not classifiable

Cobalt lithium manganese nickel oxide (182442-95-1)
IARC group 1 - Carcinogenic to humans

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 fish</th>
<th>EC50 Daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (7440-50-8)</td>
<td>0.0068 - 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
<td>0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
</tbody>
</table>
Copper (7440-50-8)

| LC50 fish | < 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.
Product/Packaging disposal recommendations : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not applicable

Transportation of Dangerous Goods
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>5.7%</td>
</tr>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Phosphate(1-), hexafluoro-, lithium (21324-40-3)
EPA TSCA Regulatory Flag : P - P - indicates a commenced Premanufacture Notice (PMN) substance.

Polypropylene (9003-07-0)
EPA TSCA Regulatory Flag : XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
### 15.2. International regulations

#### CANADA
- **Graphite (7782-42-5)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Phosphate(1-), hexafluoro-, lithium (21324-40-3)**
  - Listed on the Canadian NDSL (Non-Domestic Substances List)
- **Ethylene carbonate (96-49-1)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Diethyl carbonate (105-58-8)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Dimethyl carbonate (616-38-6)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Polypropylene (9003-07-0)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Iron (7439-89-6)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Copper (7440-50-8)**
  - Listed on the Canadian DSL (Domestic Substances List)
- **Aluminum (7429-90-5)**
  - Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations
- **Graphite (7782-42-5)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Phosphate(1-), hexafluoro-, lithium (21324-40-3)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Ethylene carbonate (96-49-1)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Diethyl carbonate (105-58-8)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Dimethyl carbonate (616-38-6)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Iron (7439-89-6)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Copper (7440-50-8)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Aluminum (7429-90-5)**
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### National regulations
**Graphite (7782-42-5)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on Turkish inventory of chemical
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Phosphate(1-), hexafluoro-, lithium (21324-40-3)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Ethylene carbonate (96-49-1)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Diethyl carbonate (105-58-8)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Dimethyl carbonate (616-38-6)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Polypropylene (9003-07-0)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
- Listed on the Japanese ISHL (Industrial Safety and Health Law)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

**Iron (7439-89-6)**

- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on Turkish inventory of chemical
- Listed on the TCSI (Taiwan Chemical Substance Inventory)
### Copper (7440-50-8)
- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the Korean ECL (Existing Chemicals List)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

### Aluminum (7429-90-5)
- Listed on the AICS (Australian Inventory of Chemical Substances)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on NZIoC (New Zealand Inventory of Chemicals)
- Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- Listed on INSQ (Mexican National Inventory of Chemical Substances)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

### Cobalt lithium manganese nickel oxide (182442-95-1)
- Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
- Listed on the TCSI (Taiwan Chemical Substance Inventory)

### 15.3. US State regulations
- California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
</tr>
<tr>
<td>IMDG</td>
</tr>
<tr>
<td>IATA</td>
</tr>
<tr>
<td>ADN</td>
</tr>
<tr>
<td>RId</td>
</tr>
<tr>
<td>PBT</td>
</tr>
<tr>
<td>vPvB</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>PNEC</td>
</tr>
<tr>
<td>LC50</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>TWA</td>
</tr>
<tr>
<td>STEL</td>
</tr>
</tbody>
</table>

Key literature references and sources for data:
- ECHA: http://echa.europa.eu/
- IFA GESTIS: http://gestis-en.itrust.de/ntx/gateway.dll?f=templates$fn=default.htm$vid=gestiseng$sdbeng
- ICSC: http://www.ilo.org/dyn/icsc/showcard.home

SDS US (GHS HazCom 2012)
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.