1. IDENTIFICATION

Product identifier

Product Name Rechargeable Li-on Battery Wistron-2800 (1466958)

Other means of identification

Product Code(s) 1468438

Recommended use of the chemical and restrictions on use

Recommended Use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Initial supplier identifier Honeywell CPG

Address 2106 S. 54th Street
Suite 4
Rogers
AR
72758
US

Telephone Phone: 479-271-7934
E-mail al.coffman@honeywell.com

Emergency telephone number

Company Emergency Phone Number 479-271-7934
This is a battery. In case of rupture:

<table>
<thead>
<tr>
<th>Skin corrosion/irritation</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

**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 (In case of rupture)**
- 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 (In case of rupture)**
- 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
Other information
May be harmful if swallowed Very toxic to aquatic life Very toxic to aquatic life with long lasting effects

Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Cobalt Oxide (CoLiO2)</td>
<td>12190-79-3</td>
<td>40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Iron</td>
<td>7439-89-6</td>
<td>14</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Propylene carbonate</td>
<td>108-32-7</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Phosphate(1-), hexafluoro-, lithium</td>
<td>21324-40-3</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures (First aid is upon rupture of sealed battery.)

General advice
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
Plenty of water, carbon dioxide gas, nitrogen gas, chemical powder fire extinguishing medium and fire foam

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

Unsuitable extinguishing media
Do not scatter spilled material with high pressure water streams.

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 fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout 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.

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.

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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario TWAEV</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Cobalt Oxide (CoLiO2) 12190-79-3</td>
<td>TWA: 0.02 mg/m³</td>
<td>TWA: 0.02 mg/m³</td>
<td>TWA: 0.02 mg/m³</td>
<td>TWA: 0.02 mg/m³</td>
</tr>
<tr>
<td>Graphite 7782-42-5</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
</tr>
<tr>
<td>Copper 7440-50-8</td>
<td>TWA: 0.2 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
</tr>
<tr>
<td>Aluminum 7429-90-5</td>
<td>TWA: 10 mg/m³  TWA: 5 mg/m³</td>
<td>TWA: 1.0 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 10 mg/m³  TWA: 5 mg/m³</td>
</tr>
<tr>
<td>Phosphate(1-), hexafluoro-, lithium 21324-40-3</td>
<td>TWA: 2.5 mg/m³</td>
<td>TWA: 2.5 mg/m³</td>
<td>TWA: 2.5 mg/m³</td>
<td>TWA: 2.5 mg/m³</td>
</tr>
</tbody>
</table>

**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**  
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble in water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.


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. May be harmful if swallowed.

Information on toxicological effects

Symptoms

Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute Toxicity

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

<table>
<thead>
<tr>
<th></th>
<th>ATEmix (oral)</th>
<th>ATEmix (dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,560.80 mg/kg</td>
<td>23,700.00 mg/kg</td>
</tr>
</tbody>
</table>

Unknown acute toxicity

- 21 % of the mixture consists of ingredient(s) of unknown toxicity
- 21 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 21 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>= 30 g/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Propylene carbonate</td>
<td>= 29000 mg/kg (Rat)</td>
<td>&gt; 3000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

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. Causes serious eye irritation.

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.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Cobalt Oxide (CoLiO2)</td>
<td>A3</td>
<td>Group 2B</td>
<td>Reasonably Anticipated</td>
<td>X</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>-</td>
<td>96h LC50: = 13.6 mg/L (Morone saxatilis)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Copper</td>
<td>96h EC50: = 0.031 - 0.054 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata)</td>
<td>96h LC50: = 0.052 mg/L (Oncorhynchus mykiss) 96h LC50: &lt; 0.3 mg/L (Pimephales promelas) 96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas) 96h LC50: = 0.2 mg/L (Pimephales promelas) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.8 mg/L (Cyprinus carpio) 96h LC50: = 1.25 mg/L (Lepomis macrochirus)</td>
<td>-</td>
<td>48h EC50: = 0.03 mg/L</td>
</tr>
<tr>
<td>Propylene carbonate</td>
<td>72h EC50: &gt; 500 mg/L (Desmodesmus subspicatus)</td>
<td>96h LC50: = 5300 mg/L (Leuciscus idus) 96h LC50: &gt; 1000 mg/L (Cyprinus carpio)</td>
<td>EC50 &gt; 10000 mg/L 17 h</td>
<td>48h EC50: &gt; 500 mg/L</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**
No information available.
Bioaccumulation

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene carbonate</td>
<td>0.48</td>
</tr>
</tbody>
</table>

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

Proper Shipping Name
NOT REGULATED

Hazard Class
N/A

Emergency Response Guide Number
147

MEX
Not regulated

ICAO
Not regulated

IATA

Proper Shipping Name
NON REGULATED

Hazard Class
9

IMDG/IMO
Not regulated
1468438 - Rechargeable Li-on Battery Wistron-2800
(1466958)

Revision Date 03-Aug-2018

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

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  Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date 03-Aug-2018

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