

Safety Data Sheet

Issue date: 14.06.2022

Version 2

Last Revision: 14.06.2022

1 Identification· **Product identifier**· **Product name:** Rechargeable Lithium Ion Battery 18V N· **Part number:** VPCXB18-1· **Technical function**

to power equipment

Ratings: 18V, 6.0 Ah, 108 Wh

Weight: 608.3 grams

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

CPS Australia Pty Ltd (ABN 73092173665)

· **Address:**

· 109 Welland Avenue Welland

· SA 5007 Australia

· Tel: +61 8 8340 7055

· Fax: +61 8 8340 7033

· Email: sales@cpsaustralia.com.au

· **Manufacturer/Supplier:** CPS Products Inc - USA· **Emergency telephone number:** National Poisons Info Centre: 13 11 26 (24 hours)**2 Hazard(s) Identification**· **Classification of the substance or mixture**

Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria is not designed or intended to be used to classify the physical, health and environmental hazards of an article.

Acute Tox. 2 H310 Fatal in contact with skin.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 2 H351 Suspected of causing cancer. Route of exposure: Inhalation.

STOT RE 2 H373 May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Label elements**· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**· **Signal word** Danger· **Hazard-determining components of labelling:**

Lithiumhexafluorophosphat(1-)

Lithium cobalt(III) oxide

nickel

· **Hazard statements**

Fatal in contact with skin.

May cause an allergic skin reaction.

Suspected of causing cancer. Route of exposure: Inhalation.

May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

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Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

Obtain special instructions before use.

Do not breathe fume/spray.

Wash thoroughly after handling.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents in accordance with local regulations.

· **Other hazards**· **PBT:** Not applicable.· **vPvB:** Not applicable.**3 Composition and Information on Ingredients**· **Chemical characterisation: Mixtures**· **Chemical components:**

12190-79-3	Lithium cobalt(III) oxide	≥10-≤50%
21324-40-3	Lithiumhexafluorophosphat(1-)	≥10-≤50%
7440-50-8	copper	≥2.5-≤25%
7429-90-5	aluminium	≥2.5-≤10%
7440-02-0	nickel	≥0-≤10%

· **Other Ingredients**

7782-42-5	Graphite	≥10-≤50%
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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.**4 First Aid Measures**· **Description of first aid measures**· **General information:** Immediately remove any clothing soiled by the product.· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.· **After eye contact:**

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

· **After swallowing:** If symptoms persist consult doctor.· **Information for doctor:** Treat Symptomatically· **Most important symptoms and effects, both acute and delayed**

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

See section 11.

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

No further relevant information available.

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5 Fire Fighting Measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 - **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
 - **Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
 - **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
 - **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
See section 10 for incompatible materials.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

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8 Exposure controls and personal protection· **Control parameters**

· Ingredients with limit values that require monitoring at the workplace:	
7782-42-5 Graphite (25-50%)	
WES	Long-term value: 3 mg/m ³
7440-50-8 copper (10-25%)	
WES	Long-term value: 1* 0.2** mg/m ³ *dust & mists (as Cu) **fume
7429-90-5 aluminium (2.5-10%)	
WES	Long-term value: 10* 5** mg/m ³ *metal dust; **welding, pyro powders
7440-02-0 nickel (2.5-10%)	
WES	Long-term value: 1 mg/m ³ Metal: Sen

· **Additional information:** The lists valid during the making were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Store protective clothing separately.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

9 Physical and Chemical Properties· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· **Form:** Fluid
· **Colour:** According to product specification
· **Odour:** Characteristic
· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.· **Change in condition**

· **Melting point/freezing point:** Undetermined.
· **Initial boiling point and boiling range:** Undetermined.

· **Flash point:** Not applicable.· **Flammability (solid, gas):** Not determined.· **Decomposition temperature:** Not determined.

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· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· water:	Insoluble.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· Other information	No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

11 Toxicological Information

- **Information on toxicological effects**
 - **Acute toxicity**

· LD/LC50 values relevant for classification:			
ATE (Acute Toxicity Estimates)			
Oral	LD50	333-1,000 mg/kg	
Dermal	LD50	167-500 mg/kg	
21324-40-3 Lithiumhexafluorophosphat(1-)			
Oral	LD50	100 mg/kg (ATE)	
Dermal	LD50	50 mg/kg (ATE)	

- **Primary irritant effect:**
 - **Skin corrosion/irritation** May cause mild skin irritation.

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- **Serious eye damage/irritation** May cause eye irritation.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological Information

- **Toxicity**
 - **Aquatic toxicity:** Harmful to aquatic life with long lasting effects.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
 - **Remark:** Harmful to fish
- **Additional ecological information:**
 - **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** Avoid release to the environment.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> · UN-Number · ADG, IMDG, IATA | UN3480 (UN3481 when the battery is contained in equipment or packed with equipment) | As per Report LCS220402105ASA these batteries passed the applicable tests set out in Subsection 38.3 of the UN Manual of Tests and Criteria. |
| <ul style="list-style-type: none"> · UN proper shipping name · ADG · IMDG, IATA | UN3480 LITHIUM ION BATTERIES
LITHIUM ION BATTERIES | |

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· **Transport hazard class(es)**· **ADG**· **Class**

9 (M4) Miscellaneous dangerous substances and articles.

· **Label**

9A

· **IMDG, IATA**

Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965 Section IB, or (PI) 966 Section II, or (PI) 967 Section II appropriate of IATA DGR 63rd (2022 Edition) for transportation.

· **Packing group**· **ADG, IMDG, IATA**

Not Regulated

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Hazard identification number (Kemler code): -**· **EMS Number:**

F-A,S-I

· **Stowage Category**

A

· **Stowage Code**

SW19 For batteries transported in accordance with SP 376 or SP 377 Category C, unless transported on a short international voyage.

· **Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **ADG**· **Limited quantities (LQ)**

0

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

· **Transport category**

2

· **Tunnel restriction code**

E

· **IMDG**· **Limited quantities (LQ)**

0

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

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· **UN "Model Regulation":**

UN 3480 LITHIUM ION BATTERIES

15 Regulatory information· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No REACH Annex XVII restrictions

Contains no REACH candidate substance

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**· **Signal word** Danger· **Hazard-determining components of labelling:**

Lithiumhexafluorophosphat(1-)

Lithium cobalt(III) oxide

nickel

· **Hazard statements**

Fatal in contact with skin.

May cause an allergic skin reaction.

Suspected of causing cancer. Route of exposure: Inhalation.

May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

Obtain special instructions before use.

Do not breathe fume/spray.

Wash thoroughly after handling.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents in accordance with local regulations.

· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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16 Other information

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

Contact:

Engineering Department

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Abbreviations and acronyms:

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Acute toxicity – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

(GHS) Globally Harmonised System of classification and labelling of chemicals (7th revised edition).

* **Data compared to the previous version altered.**

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