

# SAFETY DATA SHEET

## RECHARGEABLE LITHIUM ION BATTERY 18V

Infosafe No.: LQ7VN  
ISSUED Date: 09/05/2017  
Issued by: CPS Australia Pty Ltd

### 1. IDENTIFICATION

**GHS Product Identifier**

RECHARGEABLE LITHIUM ION BATTERY 18V

**Company Name**

CPS Australia Pty Ltd (ABN 73092173665)

**Address**

109 Welland Avenue Welland  
South Australia 5007 Australia

**Telephone/Fax Number**

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**Emergency phone number**

National Poisons Info Centre: 13 11 26 (24 hours)

**E-mail Address**

sales@cpsaustralia.com.au

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

Rechargeable lithium ion battery

### 2. HAZARD IDENTIFICATION

**GHS classification of the substance/mixture**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients**

Name	CAS	Proportion
Propylene carbonate	108-32-7	-
Lithium	7439-93-2	-
1,2-Dimethoxyethane	110-71-4	-
Manganese Dioxide	1313-13-9	-
Lithium perchlorate	7791-03-9	-
Lithium trifluoromethane sulphonate	33454-82-9	-

## 4. FIRST-AID MEASURES

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### Inhalation

Not considered a potential route of exposure for intact product, when used as intended. However, if the sealed unit is damaged and if inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

### Ingestion

Not considered a potential route of exposure for intact product, when used as intended. However, if the sealed unit is damaged and exposure occurs, do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

### Skin

Not considered a potential route of exposure for intact product, when used as intended. However, if the sealed unit is damaged and exposure occurs, remove immediately any contaminated or splash cloth and wash before reuse. Wash off skin thoroughly with cold water during more than 15 minutes. Consult a doctor.

### Eye contact

Not considered a potential route of exposure for intact product, when used as intended. However, if the sealed unit is damaged and contents is in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

### First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

### Advice to Doctor

Treat symptomatically.

### Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

## 5. FIRE-FIGHTING MEASURES

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### Suitable Extinguishing Media

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

### Unsuitable Extinguishing Media

Do not use water jet.

### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of nitrogen, CO<sub>2</sub> and CO.

### Specific Hazards Arising From The Chemical

This product will burn and/or decompose under fire conditions.

### Hazchem Code

4W

### Decomposition Temperature

Not available

### Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Protection against potentially toxic gases that can be emitted is critical. Water may cause splattering.

## 6. ACCIDENTAL RELEASE MEASURES

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### Emergency Procedures

If battery internal cells become damaged, they could possibly leak miniscule amounts of contaminants. Quarantine contaminated area at a 33 feet radius from the centre of contamination. Cover spilled materials with absorbent non-reactive materials. Inform appropriate authorities if contamination occurs. Seal all possible locations where contaminants might migrate into the environment. Clean up solids and place them into a waste container safe for disposing of contaminated trash. Appropriately transport contaminated material to a waste facility capable of handling contaminated materials.

## 7. HANDLING AND STORAGE

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### Precautions for Safe Handling

Avoid shorting the battery. Do not immerse in water. Do not disassemble or deform the battery. Do not expose to, or dispose of the battery in fire. Avoid excessive physical shock or vibration. Battery must be charged in an approved charger. Never use a battery that has suffered abuse.

### Conditions for safe storage, including any incompatibilities

Store battery packs in a cool (25°C), dry (<85% humidity) well ventilated area. Do not store battery packs near heat, high humidity, open flame, sunlight, water, seawater, strong acids, strong oxidizers, strong reducing agents, strong alkalis or metal wire.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Occupational exposure limit values

No exposure value assigned for this specific material. However, the available exposure limits for battery contents are given below:

Manganese, dust & compounds (as Mn)

TWA: 1 mg/m<sup>3</sup>

Manganese, fume (as Mn)

TWA: 1 mg/m<sup>3</sup>

STEL: 3 mg/m<sup>3</sup>

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

### Biological Limit Values

No biological limits allocated.

### Appropriate Engineering Controls

None required, when used as intended.

### Respiratory Protection

None required, when used as intended. When handling damaged product, if engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

### Eye Protection

None required, when used as intended. When handling damaged product, safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

### Hand Protection

None required, when used as intended. Wear gloves of impervious material when dealing with a leaking or ruptured cell or battery. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

### Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Article - Battery	Appearance	Solid
Colour	Not available	Odour	Odourless
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Not miscible or difficult to mix
Specific Gravity	Not available	pH	Not available
Vapour Pressure	Not available	Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Partition Coefficient: n-octanol/water	Not available
Flash Point	Not applicable	Flammability	Not applicable
Auto-Ignition Temperature	Product is not selfigniting.	Explosion Limit - Upper	Product does not present an explosion hazard
Explosion Limit - Lower	Product does not present an explosion hazard		

## 10. STABILITY AND REACTIVITY

### Reactivity

The internal cells within the battery may become unstable due to abusive conditions.

### Chemical Stability

Stable under normal conditions of storage and handling.

### Conditions to Avoid

Do not immerse in water or any other high corrosive conductive liquid.

### Incompatible materials

Strong acids, strong oxidizers, strong reducing agents and strong alkalis.

### Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of nitrogen, CO<sub>2</sub> and CO.

### Possibility of hazardous reactions

Reacts with incompatibles.

### Hazardous Polymerization

Not available.

## 11. TOXICOLOGICAL INFORMATION

### Toxicology Information

No toxicity data available for this product.

The battery presents no toxicological effects under normal use. Within recommended conditions, the electrode materials and liquid electrolytes do not react when the cells remain sealed. Exposure to these hazardous components is only possible if the battery leaks or vents.

### Ingestion

Electrolyte ingestion may cause damages to body tissues and to respiratory and digestive systems.

### Inhalation

No adverse effects expected. Contents of an opened cell can cause respiratory system and mucosa irritation.

**Skin**

Electrolyte contained within the cells of the battery is a corrosive liquid. May cause skin irritation. A sealed battery presents no danger to a person's hand or skin.

**Eye**

Contents of an opened accumulator may cause eye irritation.

**Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

Not expected to be a skin sensitiser.

**Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard.

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT-single exposure**

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

Not expected to cause toxicity to a specific target organ through repeated or prolonged exposure.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity**

Cells or batteries under normal use conditions pose no ecotoxicity hazard.

**Persistence and degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Prevent this material entering waterways, drains and sewers.

## 13. DISPOSAL CONSIDERATIONS

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**Disposal considerations**

Dispose of or recycle in accordance with appropriate local regulations.

## 14. TRANSPORT INFORMATION

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**Transport Information**

Road and Rail Transport:

This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods

Class 9: Miscellaneous substances Dangerous Goods are incompatible in a placard load with any of the following:

Class 1: Explosives (when the class 9 substance is a fire risk substance) Division 5.1: Oxidising substances (when the class 9 substance is a fire risk substance) and

Division 5.2: Organic peroxides (when the class 9 substance is a fire risk substance)

**Marine Transport (IMO/IMDG):**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No.: 3480

Proper Shipping Name: LITHIUM ION BATTERIES

DG Class: 9

Packaging Group: -

EMS No.: F-A, S-I

Special Provisions: 188, 230, 310, 348, 376, 377, 384

**Air Transport (ICAO/IATA):**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 3480

Proper Shipping Name: : Lithium ion batteries

Class: 9

Packing Group: -

Label: Miscellaneous Lithium batt

Packing Instruction: Forbidden (For passenger and cargo aircraft)

Packing Instruction: 965 (For cargo aircraft only)

Special Provisions: A88, A99, A154, A164, A183, A201, A206, A331

**U.N. Number**

3480

**UN proper shipping name**

LITHIUM ION BATTERIES

**Transport hazard class(es)**

9

**Hazchem Code**

4W

**Special Precautions for User**

Not available

**IERG Number**

26

**IMDG Marine pollutant**

No

**Transport in Bulk**

Not available

## 15. REGULATORY INFORMATION

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**Regulatory information**

Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Poisons Schedule**

Not Scheduled

## 16. OTHER INFORMATION

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**Date of preparation or last revision of SDS**

SDS Created: May 2017

**References**

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

## END OF SDS

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