

# SAFETY DATA SHEET

## LITHIUM ION BATTERY

Infosafe No.:LQBQ9  
ISSUED Date :01/06/2023  
ISSUED by:COOLDRIVE AUTO PARTS

### Section 1 -Identification

---

**Product Identifier**

LITHIUM ION BATTERY

**Product Code**

HU6491

**Company Name**

COOLDRIVE AUTO PARTS

**Address**

22-28 Lexton Road Box Hill  
Vic 3128 AUSTRALIA

**Telephone/Fax Number**

Tel:03 9896 7300  
Fax:03 9890 0061

**Emergency Phone Number**

1800 638 556

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

Lithium ion battery

**Additional Information**

Rating:12.8V,100Ah,1280Wh

### Section 2 -Hazard(s)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)

**Other Information**

This article is the Li-ion Battery Pack,Watt hour rate 1280Wh.Which belong to the Class 9 of dangerous goods.

## Section 3 -Composition and Information on Ingredients

### Ingredients

Name	CAS	Proportion
Lithium iron phosphate	15365-14-7	30-40 %
Lithium hexafluorophosphate	21324-40-3	10-25 %
Graphite	7782-42-5	15-17 %
Copper (Foil, Rod, Slug)	7440-50-8	1-10 %
Aluminum foil	7429-90-5	1-<10 %
Polyvinylidene fluoride	24937-79-9	1-<5 %
Polyethylene	9002-88-4	1-<5 %
Polypropylene	9003-07-0	1-<5 %
Styrene, 1,3- butadiene polymer	9003-55-8	0.1-<1 %
Carboxymethyl cellulose	9000-11-7	0.1-<1 %
Nickel	7440-02-0	0.1-<1 %
Ingredients determined not to be hazardous		Balance

### Information on Composition

The hazardous components of this cell or battery are contained within a sealed unit.

## Section 4 -First Aid Measures

### Inhalation

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 affected person from contaminated area.Keep at rest until recovered.If symptoms develop and/or persist 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 all contaminated clothing immediately.Wash affected area thoroughly with soap and water.Wash contaminated clothing before reuse or discard.Seek medical attention.

### Eye

Not considered a potential route of exposure for intact product,when used as intended.However,if the sealed unit is damaged and contents are 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.

## Section 5 -Firefighting Measures

### Suitable Extinguishing Media

Water,CO2.

### **Unsuitable Extinguishing Media**

Not available

### **Hazards from Combustion Products**

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including lithium oxide, peroxides, carbon monoxide, carbon dioxide and oxides of nitrogen.

### **Specific hazards arising from the chemical**

This product will readily burn under fire conditions. Cell may vent when subjected to excessive heat-exposing battery contents.

### **Hazchem Code**

2Y

### **Decomposition Temperature**

Not available

### **Precautions in connection with Fire**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from a protected location or a safe distance. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

## **Section 6 -Accidental Release Measures**

---

### **Emergency Procedures**

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate.

Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapours. Remove spilled liquid with absorbent and incinerate. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

## **Section 7 -Handling and Storage**

---

### **Precautions for Safe Handling**

The battery should not be opened, destroyed or incinerated, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.

Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids. Avoid mechanical or electrical abuse.

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

Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

### **Other Information**

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures.

Do not short or install with incorrect polarity.

## **Section 8 -Exposure Controls and Personal Protection**

---

### **Occupational exposure limit values**

Airborne exposures to hazardous substances are not expected when the cells or batteries are used for their intended purposes. Exposure standards are not applicable to the sealed articles.

### **Biological Monitoring**

No biological limits allocated.

### **Control Banding**

Not available

### Engineering Controls

Use local exhaust ventilation or other engineering controls to control sources of dust,mist,fumes and vapour.Keep away from heat and open flame.Store in a cool,dry place.

### Respiratory Protection

None required,when used as intended.Industrial Application: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 and Face Protection

None required,when used as intended.Industrial Application: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 (series)-Eye Protectors for Industrial Applications.

### Hand Protection

Wear gloves of impervious material.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.

### Thermal Hazards

No further relevant information available.

### 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.

## Section 9 -Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Article -Battery	Appearance	Cuboid
Colour	Not available	Odour	If leaking,smells of medical ether
Melting Point	Not applicable	Boiling Point	Not applicable
Decomposition Temperature	Not available	Solubility in Water	Not applicable
Specific Gravity	Not applicable	pH	Not applicable
Vapour Pressure	Not applicable	Relative Vapour Density (Air=1)	Not applicable
Evaporation Rate	Not applicable	Odour Threshold	Not applicable
Viscosity	Not applicable	Partition Coefficient:n-octanol/water (log value)	Not applicable
Flash Point	Not applicable	Flammability	Not applicable.
Auto-Ignition Temperature	Not applicable	Explosion Limit -Upper	Not applicable
Explosion Limit -Lower	Not applicable	Oxidising Properties	Not available
Particle Characteristics	Not applicable		

## Section 10 -Stability and Reactivity

### Reactivity

Reacts with incompatible materials.

**Chemical Stability**

Stable under normal conditions of storage and handling.

**Possibility of hazardous reactions**

Reacts with incompatible materials.

**Conditions to Avoid**

Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge.  
Short circuit. Expose over a long period to humid conditions.

**Incompatible Materials**

Oxidising agents, alkalis, water.

**Hazardous Decomposition Products**

Under fire conditions this product may emit toxic fumes and may form peroxides.

**Hazardous Polymerization**

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

**Section 11 - Toxicological Information**

---

**Toxicology Information**

No toxicity data available for this product. Signs & symptoms: None, unless battery ruptures. In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

**Ingestion**

Ingestion of battery contents: Poisoning if swallowed.

**Inhalation**

Inhalation of vapours from a leaking cell or battery can cause irritation of the mouth and upper respiratory tract.

**Skin**

Contents of an open battery can be irritating or corrosive to skin. The symptoms may include redness, itching, swelling or burns. Prolonged or repeated skin contact may cause dermatitis.

**Eye**

Contents of an open battery can be severely irritating or corrosive to eyes. The symptoms may include redness, itching, blurred vision, tearing or burns. It can cause eye damage.

**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.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

**Other Information**

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

## Section 12 -Ecological Information

---

### Ecotoxicity

In the event that this battery has been ruptured,harmful to aquatic life with long-lasting effects.

### Persistence and degradability

Not available

### Mobility

Not available

### Bioaccumulative Potential

Slowly Bio-degradable.

### Other Adverse Effects

Not available

### Environmental Protection

Do not discharge this material into waterways,drains and sewers.

### Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

## Section 13 -Disposal Considerations

---

### Disposal Considerations

This product can be disposed through a licensed commercial waste collection service,in accordance with applicable local and national regulations.Return whole scrap batteries to the distributor,manufacturer or a licensed battery recycler.Do not discharge into drains,sewers,waterways or soil.To minimise personal exposure to the chemical,refer to Section 8-Exposure controls and personal protection.

## Section 14 -Transport Information

---

### Transport Information

Road and Rail Transport:

This material is classified as a Class 9 (Miscellaneous Dangerous Goods)dangerous Goods according to The Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

Class 9 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,Oxidizing agents (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).

However,this product is not recognised as 'DANGEROUS GOODS',when its transport condition accords with Special Provisions 188, 230 and 310 of the ADG Code.

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:188,230,310,348,376,377,384,387

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:See 965 (For cargo aircraft only)  
Special Provisions:A88,A99,A154,A164,A183,A201,A213,A331,A334,A802

**ADG U.N.Number**

3480

**ADG Proper Shipping Name**

LITHIUM ION BATTERIES

**ADG Transport Hazard Class**

9

**Hazchem Code**

2Y

**IERG Number**

26

**Special Precautions for User**

Not available

**Additional Information**

The product may be transported under UN number 3481 also.

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.:3481

Proper Shipping Name:LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)

DG Class:9

Packaging Group:-

EMS No.:F-A,S-I

Special Provisions:188,230,310,348,360,376,377,384,387,390

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:3481

Proper Shipping Name::Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment (including ion polymer batteries)

Class:9

Packing Group:-

Label:Miscellaneous Lithium batt

Packing Instruction:Forbidden (For passenger and cargo aircraft)

Packing Instruction:See 966 (Lithium ion batteries packed with equipment)(For cargo aircraft only)

Packing Instruction:See 967 (Lithium ion batteries contained in equipment)For cargo aircraft only)

Special Provisions:

Lithium ion batteries packed with equipment:A88,A99,A154,A164,A181,A185,A213,A802

Lithium ion batteries contained in equipment:A48,A88,A99,A154,A164,A181,A185,A213,A220

The product may be transported under UN number 3171 also.

HAZCHEM code:4W

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.:3171

Proper Shipping Name:BATTERY-POWERED VEHICLE

DG Class:9

Packaging Group:-

EMS No.:F-A,S-I

Special Provisions:388 961 962 971

**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.:3171

Proper Shipping Name:Battery-powered vehicle

Class:9

Packing Group:-

Label:Miscellaneous

Packing Instruction:952 (For passenger and cargo aircraft)

Packing Instruction:952 (For cargo aircraft only)

**Special Provisions:**

Battery-powered vehicle:A67,A87,A94,A154,A164,A214

**IMDG Marine pollutant**

No

**Transport in Bulk**

Not available

**Additional Information**

The product may be transported under UN number 3481 also.

**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.:3481

Proper Shipping Name:LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)

DG Class:9

Packaging Group:-

EMS No.:F-A,S-I

Special Provisions:188,230,310,348,360,376,377,384,387,390

**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.:3481

Proper Shipping Name::Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment (including ion polymer batteries)

Class:9

Packing Group:-

Label:Miscellaneous Lithium batt

Packing Instruction:Forbidden (For passenger and cargo aircraft)

Packing Instruction:See 966 (Lithium ion batteries packed with equipment)(For cargo aircraft only)

Packing Instruction:See 967 (Lithium ion batteries contained in equipment)For cargo aircraft only)

**Special Provisions:**

Lithium ion batteries packed with equipment:A88,A99,A154,A164,A181,A185,A213,A802

Lithium ion batteries contained in equipment:A48,A88,A99,A154,A164,A181,A185,A213,A220

The product may be transported under UN number 3171 also.

HAZCHEM code:4W

**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.:3171

Proper Shipping Name:BATTERY-POWERED VEHICLE



DG Class:9  
Packaging Group:-  
EMS No.:F-A,S-I  
Special Provisions:388 961 962 971

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:3171

Proper Shipping Name:Battery-powered vehicle

Class:9

Packing Group:-

Label:Miscellaneous

Packing Instruction:952 (For passenger and cargo aircraft)

Packing Instruction:952 (For cargo aircraft only)

Special Provisions:

Battery-powered vehicle:A67,A87,A94,A154,A164,A214

## Section 15 -Regulatory Information

---

### 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). (General Exemption:Batteries)

### Poisons Schedule

Not Scheduled

### Montreal Protocol

Not listed

### Stockholm Convention

Not listed

### Rotterdam Convention

Not listed

### International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

### Agricultural and Veterinary Chemicals Act 1994

Not available

### Basel Convention

Not available

## Section 16 -Any Other Relevant Information

---

### Date of Preparation

SDS created:June 2023

### Version Number

1.0

### Literature 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.

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

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.  
Montreal Protocol on Substances that Deplete the Ozone Layer.  
Stockholm Convention on Persistent Organic Pollutants (POPs).  
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.  
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.  
International Air Transport Association (IATA) Dangerous Goods Regulations.  
International Maritime Dangerous Goods (IMDG) Code.  
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 (7th revised edition).  
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

## END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.