SAFETY DATA SHEET

LUMOS FP200 HEADLAMP

Infosafe No.: LQCO7
ISSUED Date : 17/06/2025
ISSUED by: ADVENTURE OPERATIONS AUSTRALIA PTY LTD

Section 1 - Identification

Product Identifier
LUMOS FP200 HEADLAMP

Product Code
10001969

Company Name
ADVENTURE OPERATIONS AUSTRALIA PTY LTD (ABN 43 622 679 887)

Address
71 Charles Ulm Place Eagle Farm
QLD 4009 Australia

Telephone/Fax Number
Tel: 07 31931110

Emergency Phone Number
1800 638 556 (24h)

E-mail Address
info@adventureoperations.com

Recommended use of the chemical and restrictions on use
Battery.

Other Names

Name	Product Code
LUMOS FP500 HEADLAMP	10001970

Additional Information
Model: 103035-1100mAh
Nominal Voltage: 3.7V
Typical Capacity: 1100 mAh, 4.07 Wh

Other Information
Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, ADVENTURE OPERATIONS AUSTRALIA PTY LTD makes no representations as to the completeness or accuracy thereof. Information is supplied on the conditions that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will ADVENTURE OPERATIONS AUSTRALIA PTY LTD or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

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
The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's Hazard of rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses including but not limited to the following cases: charged for long time, short circuited, put into fire, whacked with hard object, punctured with acute object, crushed, and broken.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Lithium Cobalt Oxide (CoLiO2)	12190-79-3	35 %
Graphite	7782-42-5	22 %
Ethylene carbonate	96-49-1	14 %
Copper	7440-50-8	10 %
Lithium hexafluorophosphate	21324-40-3	5 %
Aluminium	7429-90-5	5 %
Polypropylene	9003-07-0	5 %
Ethyl methyl carbonate	623-53-0	4 %

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.
If the sealed unit is damaged and exposure occurs: remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

Eye
Not considered a potential route of exposure for intact product, when used as intended. If the sealed unit is damaged and exposure occurs: If in eyes, hold eyelids apart and flush the eye continuously with running water. 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 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
Carbon dioxide, dry chemical, foam, water spray.

Unsuitable Extinguishing Media
Do not use water jet.

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

Specific hazards arising from the chemical
May decompose upon combustion to generate irritating, corrosive or toxic fumes. Fumes may cause dizziness or suffocation.

Hazchem Code
2Y

Decomposition Temperature
Not applicable

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 safe location.

Section 6 - Accidental Release Measures

Emergency Procedures
Wear appropriate personal protective equipment and clothing to prevent exposure. Ensure adequate ventilation. Remove all sources of ignition. If the electrolyte leaks, use soil, sand or other non-combustible materials to absorb. Collect the material and place into a suitable labelled container. 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.

Section 7 - Handling and Storage

Precautions for Safe Handling
Avoid exposure. Wear appropriate protective clothing and safety gloves. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Keep away from ignition sources. Do not expose the battery to excessive physical shock or vibration. Short-circuiting should be avoided. Do not open, disassemble, burn or deform the battery. Do not short or install with incorrect polarity.

Conditions for safe storage, including any incompatibilities
Store in a cool and ventilated area. Keep away from ignition sources, heat and flame. Do not disassemble battery. Ensure that storage conditions comply with applicable local and national regulations.

Storage Temperatures
Long period storage: -10 °C - 30 °C, 60 +- 25 R.H

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values
Battery is a sealed article and exposure to ingredients is not anticipated during normal use.

Biological Monitoring
No biological limits allocated.

Control Banding
Not available

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/vapor 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. 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 (series) - Eye Protectors for Industrial Applications.

Hand Protection
None required, when used as intended. Gloves of impervious material are recommended 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.

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**	Solid
Colour	Yellow	**Odour**	Odourless
Melting Point	Not applicable	**Boiling Point**	Not applicable
Decomposition Temperature	Not applicable	**Solubility in Water**	Insoluble
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	**Volatile Component**	Not applicable
Partition Coefficient: n-octanol/water (log value)	Not applicable	**Flash Point**	Not applicable
Flammability	Non-flammable	**Auto-Ignition Temperature**	Not available
Explosion Limit - Upper	Not available	**Explosion Limit - Lower**	Not available
Explosion Properties	Not available	**Oxidising Properties**	Not available
Particle Size	Not available		

Other Information
Weight: 24.1 g
Dimension (LxWxT): (46.0x31.6x12.0) mm

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, exposure over a long period to humid conditions.

Incompatible Materials
Strong oxidising agents, mineral acids, strong alkalis, halogenated hydrocarbons.

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

Hazardous Polymerization
Not available

Section 11 - Toxicological Information

Toxicology Information
No toxicity data available for this product.

Ingestion
Ingestion unlikely due to form of product. Ingestion of battery contents may irritate the gastric tract causing nausea and vomiting.

Inhalation
No adverse effects expected. Exposure to contents of battery may cause irritation of the nose, throat and respiratory system.

Skin
Unlikely due to form of product. Exposure to contents of battery: May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye
Unlikely due to form of product. Exposure to contents of battery: May be irritating to eyes. The symptoms may include redness, itching and tearing.

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
Risk of exposure occurs only if the battery is mechanically or electrically abused.

Section 12 - Ecological Information

Ecotoxicity
No ecological data are available for this material.

Persistence and degradability
Not available

Mobility
Not available

Bioaccumulative Potential
Not available

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
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations. Do not incinerate, since batteries may explode at excessive temperatures.
To minimise personal exposure to the chemical, refer to Section 8—Exposure controls and personal protection. Return whole scrap batteries to the distributor, manufacturer or a licensed battery recycler.

Section 14 - Transport Information

Transport Information
Road and Rail Transport (ADG Code):
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, 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
Packaging Instructions (passenger & cargo): Forbidden
Packing Instructions (cargo only): See 965
Special Provisions: A88, A99, A154, A164, A183, A201, A213, A331, A334, A802

UN Number
3480

Proper Shipping Name
LITHIUM ION BATTERIES

Transport Hazard Class
9

Hazchem Code
2Y

IERG Number
26

Special Precautions for User
Not available

IMDG Marine pollutant
No

Transport in Bulk
Not available

Additional Information
UN 3481, may also be applicable when batteries are contained in equipment or packed with equipment.
The goods are complied with the requirements of Section II of Packing Instructions 967 of 65th DGR Manual of IATA (2024 Edition), Special provision 188 of IMDG CODE (Amdt. 41-22) (2022 Edition), including the passing of the UN38.3 test.

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).

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 listed

Section 16 - Any Other Relevant Information

Date of Preparation
SDS Created: June 2025

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