

SAFETY DATA SHEET

GLOWSTICK FLASHLIGHT

Infosafe No.: LQCQ3
ISSUED Date : 17/07/2025
ISSUED by: ADVENTURE TRADING NZ
LIMITED

Section 1 - Identification

Product Identifier

GLOWSTICK FLASHLIGHT

Product Code

10000734

Company Name

ADVENTURE TRADING NZ LIMITED

Address

71 Charles Ulm Place Eagle Farm
QLD 4009 Australia

Telephone/Fax Number

Tel: 03 366 1136

Emergency Phone Number

0800 154 666 (24 hours)

Email

Info@adventureoperations.com

Recommended uses and any restrictions on use or supply

Electrical storage

Other Names

Name	Product Code
KIDS ANIMAL HEADLAMPS	10000432 / 10000431 / 10000430 / 10000536 / 10000536 / 10000538

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.

Not classified as Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.

Other Information

The battery is sealed hermetically and designed to withstand temperatures and pressures encountered during normal use. Thus, the ingredients have no hazard potential except if the battery is violated or dismantled. If exposed to a fire, mechanical shocks, and electric stress by miss-use, the battery cell case will be breached and the hazardous materials may be released and acrid gas may be emitted. Therefore the batteries should not be short circuited, overcharged, punctured, incinerated, immersed in water, force discharged or exposed to temperatures above the temperature range of the cell or battery.

The classification based on the hazardous substances contained in the product is provided below for information purposes only.

Hazard Statements

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H372 Causes damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Section 3 - Composition and Information on Ingredients

Chemical Characterization

Article - Battery

Information on Composition

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

Ingredients

Name	CAS	Proportion
manganese dioxide	1313-13-9	20-35 %
*Tin	7440-31-5	<=25 %
ammonium chloride	12125-02-9	1-15 %
zinc chloride	7646-85-7	3-7 %
Carbon black	1333-86-4	3-6 %
Cadmium	7440-43-9	<0.1 %
mercury	7439-97-6	<0.001 %
Ingredients determined not to be hazardous		Balance

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 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 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. 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 or a doctor at once. (0800 764 766)

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Use foam, dry chemical powder or carbon dioxide.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Hazardous combustion products include oxides of carbon, hazardous fumes of zinc and manganese, hydrogen gas, caustic vapours of potassium hydroxide, and other toxic by-products.

Specific hazards arising from the chemical

Product is non flammable but ingredients will burn in a fire.

Batteries may rupture or explode if exposed to high temperatures, releasing hazardous contents.

Batteries close to fire should be removed if safe to do so

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. 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

Wear appropriate personal protective equipment and clothing to prevent exposure. 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. Use only in a well ventilated area. Keep containers tightly closed. Prevent the build up of dusts, mists or vapours in the work atmosphere. Do not use near ignition sources. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Do not overcharge, short-circuit, force discharge, disassemble, crush, deform, expose to high temperatures or incinerate. Do not allow battery terminals to contact each other or other metals. Do not weld, solder or in any way modify batteries. Do not damage or remove the external casing. Ensure batteries are installed with the correct polarity.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, out of direct sunlight. Ensure that storage conditions comply with applicable local and national regulations.

Ensure battery terminals are protected during storage.

Batteries must be packed in a manner to prevent short circuits. Loose batteries should not be stored in bulk.

Protect from mechanical and electrical abuse such as short circuiting, overcharging, installing with incorrect polarity, disassembling or crushing.

Section 8 - Exposure Controls and Personal Protection

Occupational Exposure Limits (OEL)

Battery cell is not a substance. It is a closed-structure mixture therefore no consideration on exposure controls. When it is opened or ruptured, then users should follow instructions for exposure controls or personal protection of each substance hazardous ingredients of battery cell, e.g. electrolyte.

Ammonium chloride fume

TWA: 10 mg/m³

STEL: 20 mg/m³

Carbon black

TWA: 3 mg/m³

NOTE: carcinogen category 2

Cadmium and compounds, as Cd

TWA: 0.004 (respirable dust)

NOTE: carcinogen category 1; bio

Manganese fume, dust and compounds, as Mn

TWA: 0.2 mg/m³

TWA: 0.02 mg/m³ (respirable dust)

NOTE: oto

Mercury, Inorganic compounds (as Hg)

TWA: 0.025 mg/m³

NOTE: skin, oto

Metal dusts, tin oxides and inorganic compounds (except SnH₄, and In₂O₅Sn) as Sn

TWA: 2 mg/m³

Zinc chloride fume

TWA: 1 mg/m³

STEL: 2 mg/m³

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.

carcinogen category 1: Confirmed carcinogen

carcinogen category 2: Suspected carcinogen

'bio' Notice: Exposure can also be estimated by biological monitoring.

'dsen' Notice: Dermal sensitiser

'Skin' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Source: Workplace Exposure Standards and Biological Exposure Indices.

Biological Limit Values

Name: Mercury, elemental

Determinant: Mercury in urine

Value: 20 µg/g creatinine

Sampling time: Prior to shift

Source: American Conference of Industrial Hygienists (ACGIH).

Name: Mercury

Determinant: Mercury in urine

Value: 20 µg/g creatinine

Sampling time: Prior to shift

Source: Workplace Exposure Standards and Biological Exposure Indices.

Name: Cadmium and inorganic compounds

Determinant: Cadmium in urine

Value: 5 µg/g creatinine

Sampling time: Not critical

Source: American Conference of Industrial Hygienists (ACGIH).

Name: Cadmium and inorganic compounds

Determinant: Cadmium in blood
Value: 5 µg/L
Sampling time: Not critical
Source: American Conference of Industrial Hygienists (ACGIH).

Name: Cadmium
Determinant: Cadmium in urine
Value: 2 µg/g creatinine
Sampling time: Not critical
Source: Workplace Exposure Standards and Biological Exposure Indices.

Appropriate Engineering Controls

None required, when used as intended.

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 Protection

None required, when used as intended.

Industrial Application: Safety glasses with full face shield should be used. 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

Not generally required. Wear chemical resistant gloves during battery component disassembly. In the event of a leakage, impervious gloves should be used such as neoprene, rubber, or nitrile gloves. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. 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	Dark grey solid, stainless steel top battery
Colour	Dark grey	Odour	Not available
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Not available
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 flammable
Auto-Ignition Temperature	Not applicable	Explosion Limit - Upper	Not available
Explosion Limit - Lower	Not available	Explosion Properties	Not available
Oxidising Properties	Not available	Particle Characteristics	Not available

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid

Mechanical and electrical abuse such as short circuiting, overcharging, installing with incorrect polarity, disassembling or crushing. Protect from heat, sparks and open flames. Avoid excessive moisture. Exposure to high temperatures.

Incompatible Materials

Strong oxidising agents, combustible materials and corrosives.

Hazardous Decomposition Products

Hazardous combustion products include oxides of carbon, hazardous fumes of zinc and manganese, hydrogen gas, caustic vapours of potassium hydroxide, and other toxic by-products.

Possibility of hazardous reactions

Reacts with incompatible materials.

Hazardous Polymerization

Not available

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

Acute Toxicity - Oral

Ammonium chloride

LD50 (rat): 1650 mg/kg

Cadmium

LD50 (rat): 890 mg/kg

Carbon black

LD50 (rat): >5000

Manganese oxide

LD50 (rat): >3478 mg/kg

Tin

LD50 (rat): >2000 mg/kg

Acute Toxicity - Inhalation

Cadmium

LC50 (rat): 0.051 mg/l/4h

Tin

LC50 (rat): >4.75 mg/kg/4h

Acute Toxicity - Dermal

Carbon black

LD50 (rabbit): >3000

Tin

LD50 (rat): >2000 mg/kg

Ingestion

Swallowing of the contents of this product can be harmful. Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

Inhalation

Inhalation of vapours from an open battery will result in respiratory irritation and possible harmful corrosive effects including burns, lesions of the nasal septum, pulmonary edema, and scarring of tissue.

Skin

Contents of an open battery can be irritating or corrosive to skin. Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

Eye

Contents of an open battery can cause eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

Respiratory Sensitisation

Contents of an open battery are not expected to be a respiratory sensitiser.

Skin Sensitisation

Contents of an open battery is 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.

Cadmium is listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Carbon black and mercury are listed as Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

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

Contents of the sealed battery not expected to cause toxicity to a specific target organ.

Prolonged or repeated exposure to contents of an open battery causes damage organs if inhaled.

Aspiration Hazard

Not expected to be an aspiration hazard.

Section 12 - Ecological Information

Ecotoxicity

Contents of an open battery is toxic to aquatic life with long lasting effects.

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.

Acute Toxicity - Fish

Carbon black

LC50 (brachydanio rerio): >1000 mg/l/96h

Tin

LC50 (fathead minnow): >0.00124 mg/l/96h

Acute Toxicity - Daphnia

Cadmium

EC50: 0.038 mg/l/48h

Acute Toxicity - Algae

Cadmium

EC50 (selenastrum capricornutum): 0.0023 mg/l

Tin

EC50 (pseudokirchnerie lla subcapitata): >0.00192 mg/l/72h

Acute Toxicity - Bacteria

Tin

EC50: >511 mg/l/3h

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Product Disposal:

This product can be disposed through a licensed commercial waste collection service. This product is non-hazardous and therefore the New Zealand HSNO regulations regarding disposal do not apply, however other regulations may apply.

As the product is a non-hazardous solid substance, it can be disposed in a licensed landfill facility after authorization.

Return whole scrap batteries to the distributor, manufacturer or a licensed battery recycler. Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in leakage and/or cell explosion.

Container Disposal:

The product is non-hazardous, therefore, the packaging may be re-used or recycled if it has been treated to remove any residual contents of the substance. Any wash-off water from the container cleaning process should be sent to a suitable waste water treatment plant before discharge into the environment.

In New Zealand, the packaging (that may or may not contain any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

Section 14 - Transport Information

Transport Information

Road and Rail Transport:

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. However special provision A123 is applied.

Special Provision A123: This entry applies to Batteries, electric storage, not otherwise listed in Subsection 4.2–List of Dangerous Goods. Examples of such batteries are: alkali-manganese, zinc-carbon and nickel-cadmium batteries. Any electrical battery or battery powered device, equipment or vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent:

- (a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals); and
- (b) unintentional activation.

The words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.

UN Number

None Allocated

Proper Shipping Name

None Allocated

Hazard Class

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

Yes

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Not classified as Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.

Tolerable exposure limit (TEL)

Not available

Environmental exposure limit (EEL)

Not available

Certified Handler

Not available

Tracking

Not available

Controlled Substance Licence Requirements

Not available

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

Agricultural Compounds, including Veterinary Medicines (ACVM)

Not available

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS

SDS created: July 2025.

Literature References

Hazardous Substances and New Organisms Act (1996).

Health and Safety at Work (Hazardous Substances) Regulations {2017}.

Workplace Exposure Standards and Biological Exposure Indices.

Agricultural Compounds and Veterinary Medicines Act (1997).

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.

Transport of Dangerous goods on land NZS 5433.

Recommendations on the Transport of Dangerous Goods - Model Regulations.

Dangerous Goods Emergency Action Code List.

Hazardous Substances (Safety Data Sheets) Notice (2017). (EPA Consolidation)

Assigning a hazardous substance to a group standard.

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

END OF SDS

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