



VUnit E-File

Safety Data Sheet

Lithium-ion batteries under normal conditions of use do not pose a physical or health risk and is therefore considered an article. Thus, they are exempt from the requirements of the Hazardous Communication Standard therefore, a SDS is not required. See 29 CFR § 1910.1200(b)(6)(v). This Safety Data Sheet and the information described voluntarily offers helpful information for safe handling and environmental care and can be provided in the event where the integrity of the battery may be compromised or the exposure duration and frequency of battery use is more than that of a consumer.
Issue date: 12/23/2025 Revision date: 3/17/2026 Supersedes: 12/23/2025 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Article
Trade name : VUnit E-File

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Battery
Restrictions on use : Only use as directed on package labeling

1.4. Supplier's details

V Beauty Pure
2257 Vista Parkway
Ste 23
West Palm Beach, Florida 33411
T 888-390-4259
regulatory@vbeautypure.com

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 854185
Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable solid, Category 1	H228	Flammable solid.
Acute toxicity (inhalation:dust,mist), Category 3	H331	Toxic if inhaled.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 1A	H350	May cause cancer.
Specific target organ toxicity — Repeated exposure, Category 1	H372	Causes damage to organs (lungs, Mucous membranes or around eyes) through prolonged or repeated exposure (if inhaled).

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



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Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: H228 - Flammable solid H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H331 - Toxic if inhaled H350 - May cause cancer. H372 - Causes damage to organs (lungs, Mucous membranes or around eyes) through prolonged or repeated exposure (if inhaled)
Precautionary statements (GHS US)	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Ground/Bond container and receiving equipment. Use explosion-proof equipment. Do not breathe mist, spray, vapors. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves, protective clothing, eye and face protection. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. In case of fire: Use water to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

The product is a Lithium ion cell or battery and is therefore classified as an article and is not hazardous when used according to the recommendations of the manufacturer. The hazard is associated with the contents of the cell or battery. Under recommended use conditions, the electrode materials and liquid electrolyte are non-reactive provided that the cell or battery integrity remains and the seals remain intact. The potential for exposure should not exist unless the cell or battery leaks, is exposed to high temperatures or is mechanically, electrically or physically abused/damaged. If the cell or battery is compromised and starts to leak, based upon the battery ingredients, the contents are classified as Hazardous.

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	GHS US classification
Cobalt compound	CAS-No.: 1307-96-6	4 – 50	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nickel oxide	CAS-No.: 1313-99-1	≤ 25	Skin Sens. 1, H317 Carc. 1A, H350 STOT RE 1, H372 Aquatic Chronic 4, H413
Ethylene carbonate	CAS-No.: 96-49-1	10 – 20	Eye Irrit. 2A, H319
Manganese dioxide	CAS-No.: 1313-13-9	≤ 15	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 2, H411
Copper	CAS-No.: 7440-50-8	2 – 10	Not classified
Aluminum	CAS-No.: 7429-90-5	2 – 10	Flam. Sol. 1, H228 Water-react. 2, H261 Aquatic Acute 2, H401

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: In the finished material form, no special first aid measures are required. The following first aid measures are required only in case of compromised product integrity. Undamaged product does not represent a danger to the health. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but, not mouth-to-mouth.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Give nothing or a little water to drink. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If you feel unwell, seek medical advice.

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4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	: In the form in which it is marketed, the product causes no danger to health for humans through inhalation, swallowing or contact with the skin. If the product form in the as-supplied state is changed through further processing (e.g. through grinding, polishing, electrical discharge machining, welding or melting) and dust or vapours are produced, the following hazards are associated with the product.
Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing). Toxic if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. Irritation (itching, redness, blistering). May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes eye irritation. Stinging. Redness, itching, tears. Blurred vision. Swelling.
Symptoms/effects after ingestion	: Ingestion unlikely.
Most Important Symptoms/Effects	: Causes skin and eye irritation. May cause an allergic skin reaction. Toxic if inhaled.
Chronic symptoms	: May cause cancer.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: IF exposed or concerned: Get medical advice/attention.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO ₂), dry chemical powder, foam. Copious amounts of water spray and/or complete immersion into water can be used to effectively extinguish a lithium ion battery fire, reduce the temperature of the battery, and contain a thermal runaway event.
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5.2. Specific hazards arising from the chemical

Fire hazard	: Flammable solid.
Explosion hazard	: Combustible. May form combustible dust concentrations in air. When exposed to extreme heat, battery within product may emit flammable vapors which, when mixed with air, can burn or be explosive.
Reactivity in case of fire	: Extreme mechanical abuse will result in rupture of the batteries. Throwing into the fire will result in burning. Large lithium ion batteries or large quantities of smaller batteries may reignite after the initial fire has been suppressed. Batteries should be stored in a safe place outside (access restriction, hazard indications) for a minimum of 72 hours.
Hazardous decomposition products in case of fire	: When a battery is heated strongly by the surrounding fire, acrid or harmful fume may be emitted.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery casing. Undamaged, closed batteries do not represent a danger to the health. Eliminate every possible source of ignition. Proper grounding procedures to avoid static electricity should be followed. Avoid all personal contact including breathing in the gas, mist, spray, vapors, dust. Do not take actions involving personal risks.
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For non-emergency personnel

Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Evacuate personnel to a safe area. Stop leak if safe to do so. Remove all sources of ignition. All equipment used when handling the product must be grounded. Consider the risk of potentially explosive atmospheres. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
Environmental precautions : Avoid release to the environment. Do not let the product reach soil, drains, sewers, or surface and ground water.

6.2. Methods and materials for containment and cleaning up

For containment : The following measures are applicable only if the product is compromised: Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Avoid creating or spreading dust. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing mist, spray, gas, dust, vapors. Avoid contact with skin and eyes. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Wear personal protective equipment. Applying pressure or deforming the battery may lead to disassembly and cause eye, skin and throat irritation. Avoid direct conductive connection across positive and negative terminals to prevent short circuit.
Local and general ventilation : If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.
Hygiene measures : Do not eat, drink or smoke when using this product. DO NOT swallow, apply excessive force to the terminals, drop, weld the terminal or wire to the body of the battery directly, short-circuit the battery, charge, forcibly discharge, heat, expose to open flame, disassemble, reverse the positive and negative terminals, use different batteries together, touch any liquid that leaks from the battery, or hold the battery for an extended period. Always wash hands after handling the product.
Additional hazards when processed : Lithium ion batteries are designed to be recharged. Use only approved chargers and procedures. Do not charge above specified rate. Improper charging may cause the battery to catch fire and/or vent flammable and toxic gases. Do not allow conductive material to touch the battery terminals. A dangerous short circuit may occur and cause battery failure and fire. Do not open, disassemble, crush, or burn batteries. Do not expose to extreme heat or fire. Protect case from puncture and damage.

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7.2. Conditions for safe storage, including incompatibilities

Storage conditions	: Keep cool. Protect from sunlight. Keep away from ignition sources. Store in a well-ventilated place.
Incompatible materials	: Do not immerse in seawater or other high conductivity liquids. Strong acids. Strong oxidizers. Bases.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Copper (7440-50-8)

USA - ACGIH® - Threshold Limit Values

Local name	Copper, as Cu
ACGIH® TLV® TWA	0.2 mg/m ³ (Fume) 1 mg/m ³ (Dusts and mists)
Remark (ACGIH®)	TLV® Basis: Irr; GI; metal fume fever
Regulatory reference	ACGIH 2025

USA - OSHA - Occupational Exposure Limits

Local name	Copper
OSHA PEL TWA	0.1 mg/m ³ (Fume (as Cu)) 1 mg/m ³ (Dusts and mists (as Cu))
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

USA - NIOSH - Occupational Exposure Limits

Local name	Copper
NIOSH REL 10h TWA	0.1 mg/m ³ (Fume (as Cu)) 1 mg/m ³ (Dusts and mists (as Cu))
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

Aluminum (7429-90-5)

USA - ACGIH® - Threshold Limit Values

Local name	Aluminum, metal and insoluble compounds
ACGIH® TLV® TWA	1 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH®)	TLV® Basis: Pneumoconiosis; LRT irr; neurotoxicity. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025

USA - OSHA - Occupational Exposure Limits

Local name	Aluminum Metal (as Al)
OSHA PEL TWA	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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Aluminum (7429-90-5)

USA - NIOSH - Occupational Exposure Limits

Local name	Aluminum Metal (as Al)
NIOSH REL 10h TWA	10 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment.

Hand protection:

None required for normal use. Use butyl rubber gloves when handling leaking batteries.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No respiratory protection needed under normal use conditions. Wear a safety respirator if handling an open or leaking cell.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

- Physical state : Solid
Color : Blue
Odor : No data available
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : Not applicable
Boiling point : No data available

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Flash point	: Not applicable
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Immiscible with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Flammable solid. Extreme mechanical abuse will result in rupture of the batteries. Throwing into the fire will result in burning.

10.2. Chemical stability

Stable under proper operation and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Eliminate all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Do not puncture, deform, mutilate, crush or disassemble the unit as it may lead to leakage of the hazardous electrolyte. Avoid short-circuiting of the unit as it may lead to an explosion. Avoid prolonged exposure to conditions of high humidity. When stored at temperatures above 50 °C (122 °F), the battery may age faster and lose its functionality. Do not allow water (or moist air) contact with this material.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Do not immerse in seawater or other high conductivity liquids. Bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. On exposure to high temperature, may decompose, releasing corrosive gases.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Inhalation:dust,mist: Toxic if inhaled.

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ATE US (dust, mist)	0.5 mg/l/4h
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Copper	
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 5.11 mg/l air
Aluminum	
LD50 oral rat	> 15900 mg/kg body weight
LC50 Inhalation - Rat	> 0.888 mg/l air
Ethylene carbonate	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
Nickel oxide	
LD50 oral rat	9900 mg/kg
LD50 oral	5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 5.08 mg/l/4h
Cobalt compound	
LD50 oral rat	202 mg/kg
LD50 oral	159 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0.06 mg/l
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Nickel oxide	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
Cobalt compound	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
Aluminum	
NOAEL (animal/male, F0/P)	1000 mg/kg body weight
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs (lungs, Mucous membranes or around eyes) through prolonged or repeated exposure (if inhaled).

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Aluminum	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.05 mg/l air
NOAEL (subchronic,oral,animal/male,90 days)	1034 mg/kg body weight
NOAEL (subchronic,oral,animal/female,90 days)	1087 mg/kg body weight
Ethylene carbonate	
LOAEL (oral,rat,90 days)	554 mg/kg body weight
Nickel oxide	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Cobalt compound	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.31 mg/l air
NOAEL (oral,rat,90 days)	3 mg/kg bw/day
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

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Viscosity, kinematic	Not applicable
Symptoms/effects	: In the form in which it is marketed, the product causes no danger to health for humans through inhalation, swallowing or contact with the skin. If the product form in the as-supplied state is changed through further processing (e.g. through grinding, polishing, electrical discharge machining, welding or melting) and dust or vapours are produced, the following hazards are associated with the product.
Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing). Toxic if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation. Irritation (itching, redness, blistering). May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes eye irritation. Stinging. Redness, itching, tears. Blurred vision. Swelling.
Symptoms/effects after ingestion	: Ingestion unlikely.
Most Important Symptoms/Effects	: Causes skin and eye irritation. May cause an allergic skin reaction. Toxic if inhaled.
Chronic symptoms	: May cause cancer.

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects

Aluminum	
EC50 72h - Algae [1]	1.05 mg/l
EC50 72h - Algae [2]	0.2 mg/l
Ethylene carbonate	
LC50 - Fish [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l

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Nickel oxide	
LC50 - Fish [1]	100 – 320 mg/l
EC50 - Crustacea [1]	6.68 mg/l
EC50 72h - Algae [1]	0.0815 – 0.148 mg/l
NOEC chronic fish	57 µg/l
NOEC chronic crustacea	8.8 – 256 µg/l
Manganese dioxide	
NOEC chronic fish	0.55 mg/l
Cobalt compound	
LC50 - Fish [1]	1.406 mg/l
EC50 - Crustacea [1]	1.49 mg/l
EC50 72h - Algae [1]	144 µg/l
EC50 96h - Algae [1]	23 µg/l

12.2. Persistence and degradability

VUnit E-File	
Persistence and degradability	Not rapidly degradable
Copper	
Persistence and degradability	Not rapidly degradable
Aluminum	
Persistence and degradability	Rapidly degradable
Ethylene carbonate	
Persistence and degradability	Not rapidly degradable
Nickel oxide	
Persistence and degradability	Not rapidly degradable
Manganese dioxide	
Persistence and degradability	Not rapidly degradable
Cobalt compound	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Batteries are not to be treated as ordinary trash. Do not dissect, pierce, crush or treat similarly. Dispose of contents/container in accordance with licensed collector's sorting instructions. Must follow special treatment according to local regulation.
Product/Packaging disposal recommendations : Battery should be fully discharged before being sent for recycling. Do not break open or damage batteries prior to disposal. Care should be taken at all times to ensure used batteries are not damaged during storage or transportation.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
UN3481	3481	3481
14.2. Proper Shipping Name		
Lithium ion batteries contained in equipment	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	Lithium ion batteries contained in equipment
14.3. Transport hazard class(es)		
9	9	9
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
	Dangerous for the environment: Yes Marine pollutant: Yes	
No supplementary information available		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : UN3481
DOT Packaging Exceptions (49 CFR 173.xxx) : 185
DOT Packaging Non Bulk (49 CFR 173.xxx) : 185
DOT Packaging Bulk (49 CFR 173.xxx) : 185
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 kg

VUnit E-File

Safety Data Sheet

Lithium-ion batteries under normal conditions of use do not pose a physical or health risk and is therefore considered an article. Thus, they are exempt from the requirements of the Hazardous Communication Standard therefore, a SDS is not required. See 29 CFR § 1910.1200(b)(6)(v). This Safety Data Sheet and the information described voluntarily offers helpful information for safe handling and environmental care and can be provided in the event where the integrity of the battery may be compromised or the exposure duration and frequency of battery use is more than that of a consumer.

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 35 kg

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG

Special provision (IMDG) : 188, 230, 310, 348, 360, 376, 377, 384, 387, 390

Limited quantities (IMDG) : 0

Excepted quantities (IMDG) : E0

Packing instructions (IMDG) : P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-I - SPILLAGE SCHEDULE India - FLAMMABLE SOLIDS (REPACKING POSSIBLE)

Stowage category (IMDG) : A

Stowage and handling (IMDG) : SW19

Properties and observations (IMDG) : Electrical batteries containing lithium ion may react (e.g. flame, heat, emission of toxic, corrosive or flammable gases or vapours) or disassemble due to damage, defects or short circuit.

IATA

PCA Excepted quantities (IATA) : E0

PCA Limited quantities (IATA) : Forbidden

PCA limited quantity max net quantity (IATA) : Forbidden

PCA packing instructions (IATA) : 967

PCA max net quantity (IATA) : 5kg

CAO packing instructions (IATA) : 967

CAO max net quantity (IATA) : 35kg

ERG code (IATA) : 12FZ

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Copper	CAS-No. 7440-50-8	2 – 10%
Aluminum	CAS-No. 7429-90-5	2 – 10%

Copper (7440-50-8)

CERCLA RQ : 5000 lb

15.2. International regulations

CANADA

Copper (7440-50-8)

Listed on the Canadian DSL (Domestic Substances List)

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Aluminum (7429-90-5)

Listed on the Canadian DSL (Domestic Substances List)

Ethylene carbonate (96-49-1)

Listed on the Canadian DSL (Domestic Substances List)

Nickel oxide (1313-99-1)

Listed on the Canadian DSL (Domestic Substances List)

Manganese dioxide (1313-13-9)

Listed on the Canadian DSL (Domestic Substances List)

Cobalt compound (1307-96-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Copper (7440-50-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Aluminum (7429-90-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Nickel oxide (1313-99-1)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Manganese dioxide (1313-13-9)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Cobalt compound (1307-96-6)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations



WARNING:

This product can expose you to Nickel oxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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Component	State or local regulations
Copper(7440-50-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Aluminum(7429-90-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Ethylene carbonate(96-49-1)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
Nickel oxide(1313-99-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Manganese dioxide(1313-13-9)	U.S. - New York City - Right to Know Hazardous Substances List

SECTION 16 Other information

Lithium-ion batteries under normal conditions of use do not pose a physical or health risk and is therefore considered an article. Thus, they are exempt from the requirements of the Hazardous Communication Standard therefore, a SDS is not required. See 29 CFR § 1910.1200(b)(6)(v). This Safety Data Sheet and the information described voluntarily offers helpful information for safe handling and environmental care and can be provided in the event where the integrity of the battery may be compromised or the exposure duration and frequency of battery use is more than that of a consumer.

Revision date : 3/17/2026
Issue date : 12/23/2025

Full text of hazard classes and H-statements	
H228	Flammable solid
H261	In contact with water releases flammable gas
H301	Toxic if swallowed
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

VUnit E-File

Safety Data Sheet

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Full text of hazard classes and H-statements

H413	May cause long lasting harmful effects to aquatic life
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Indication of changes:

Section	Changed item	Comments
14	UN-No. (DOT)	Modified
14	UN-No. (IMDG)	Modified
14	UN-No. (IATA)	Modified

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.