SAFETY DATA SHEET

Date issued : 02/27/2017
SDS number :11710500_90001 - ADHESIVE
Date revised : 07/24/2023
Revision number : 3

1. Identification

Product code: 11710500_90001 - ADHESIVE
Product description: Z3 PACER ZAP IT TUBE 4GM (12) - ADHESIVE

Manufacturer / Supplier

Pacer Technology
3281 E. Guasti Road, Suite 260
Ontario, CA 91761
Emergency contact: Chemtrec
Emergency Phone: (800) 424-9300
Customer Service: (909) 987-0550

2. Hazard identification

Classification of the substance or mixture

Physical hazards:

Flammable Liquids, Category 4

Label elements

Note: If this product is a consumer product it is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

Signal word: WARNING

Hazard statement(s)

H227: Combustible liquid.

Precautionary statement(s)

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P370: In case of fire: Use dry chemical extinguisher or flush with large amounts of water to extinguish.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of in a manner consistent with federal, state, and local regulations.

Hazards not otherwise classified: Bonds skin and eyes instantly. Do not get in eyes, in mouth or on skin.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
2-Methoxyethyl 2-cyanoacrylate	≤ 85 - 100	27816-23-5
Hydroquinone	< 0.01 - 0.1	123-31-9

4. First-aid measures

SAFETY DATA SHEET

Eye: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin: Flush skin with water for several minutes. If bonded, immerse bonded areas in warm, soapy water for several minutes. Peel or roll skin or bonded material apart. Get medical attention if irritation occurs. Remove and launder clothing before re-use.

Ingestion: Flush lips with warm water to release lips if bonded. Ingestion is unlikely, though the product may stick in the mouth. Over a period 1-2 days, the product will be loosened by saliva. Avoid swallowing the product. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air. Get medical attention if symptoms of exposure persist.

Most important symptoms and effects, both acute and delayed

Eye: Bonds eyelids immediately.

Skin: Bonds skin immediately.

Skin absorption: Large quantities may react with skin and cause skin burns.

Ingestion: May be harmful if swallowed.

Additional information: Immediate medical attention should not be required.

5. Fire-fighting measures

General hazard: Combustible liquid and vapor. Contact with water will cause the product to polymerize and become solid. Combustion will produce oxides of carbon and nitrogen, and other toxic or irritating compounds.

Suitable extinguishing media: Use dry chemical extinguisher or flush with large amounts of water.

Fire fighting procedures: Evacuate area and fight fire from a safe distance.

Fire fighting equipment: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

Hazardous decomposition products: Combustible by-products of carbon monoxide/dioxide.

6. Accidental release measures

Environmental precautions

Water spill: Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

Land spill: Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

Air spill: Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

General procedures: Evacuate spill area and keep unprotected personnel away. Remove all ignition sources such as open flames, etc. Avoid contact with eyes, skin or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles, and respirator if needed. Avoid breathing mists or vapors. Ventilate area.

Release notes: Collect material with absorbent rags (not paper towels) or wash the material down with water to solidify and scrape off surface. Rinse spill area with water.

7. Handling and storage

General procedures: Avoid breathing mists or vapors. Use with adequate ventilation.

Precautions for safe handling: Avoid contact with the eyes, skin, and clothing. Wear appropriate protective clothing as described in section 8. Wash thoroughly after handling. Keep away from flames and sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.

Conditions for safe storage: Store in a container in a cool, dry, well-ventilated location away from heat, sunlight and incompatible materials. Keep in original container. Prevent moisture contact. Keep container tightly closed when not in use.

Storage temperature: 2°C (35.6°F) Minimum to 8°C (46.4°F) Maximum

8. Exposure controls/personal protection

SAFETY DATA SHEET

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Hydroquinone	**OSHA PEL**	**TWA**		2

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Individual protection measures, such as personal protective equipment

Eye / face protection: Chemical safety goggles are recommended where splashing is possible.

Skin protection - hand protection: Impervious gloves such as nitrile gloves are suggested to prevent skin contact. Do not use PVC, Nylon, or cotton materials. Contact your glove supplier for selection assistance.

Respiratory protection: If needed, an approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form, and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Other use precautions: Impervious clothing is required to prevent skin contact and contamination of personal clothing. An eye wash facility and safety shower should be available in the work area.

9. Physical and chemical properties

Physical state: Liquid

Appearance: Paste

Color: Green

Odor: Odorless

Odor threshold: No data available

pH: Not Established

Melting point: No data available

Freezing point: No data available

Initial boiling point and boiling range: 74°C (165.2°F) to 76°C (168.8°F)

Flash point: 80°C (176°F) to 93.3°C (199.94°F)

Evaporation rate (n-butyl acetate = 1): No data available

Flammability: No data available

Lower explosion limit / flammability limit: No data available

Vapor pressure: No data available

Relative vapor density: No data available

Density: No data available

Relative density: 1.19

Solubility: Polymerizes in presence of water

Partition coefficient n-octanol/water (logarithmic value): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Dynamic viscosity: 180 to 220 at 25°C (77°F)

SAFETY DATA SHEET

Molecular weight: No data available

Pour point: No data available

Percent volatiles: No data available

VOC content: < 3 %

10. Stability and reactivity

Reactivity: Rapid exothermic polymerization will occur in presence of incompatible materials.

Dangerous polymerization: Polymerization will occur on contact with water, amines, alkali, and alcohols. The polymerization is an exothermic reaction and may cause thermal burns.

Chemical stability: Stable under normal storage and handling conditions.

Conditions to avoid: Keep away from heat, flames, and other sources of ignition. Keep dry. Avoid high humidity or high temperatures above 80C/176F.

Possibility of hazardous reactions: Possible polymerization reaction in the presence of water, amines, alkalis and alcohols.

Hazardous decomposition products: Thermal decomposition will produce oxides of carbon and nitrogen, and other toxic or irritating compounds.

Incompatible materials: Water, alcohol, amines, and alkaline materials.

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)
2-Methoxyethyl 2-cyanoacrylate	> 5000 mg/kg	> 2000 mg/kg
Hydroquinone	367.3 mg/kg	> 2000 mg/kg

Respiratory or skin sensitization: No data available for the mixture. Testing for skin sensitization is technically not feasible. The adhesive bonds instantaneous to the surface of the skin and polymerizes. The polymerized material is not able to penetrate into the epidermis.

Germ cell mutagenicity: Hydroquinone: Positive with metabolic activation and negative without metabolic activation in an In-vitro mammalian chromosome aberration test. Positive in mammalian germ cell cytogenetic assay.

Carcinogenicity

IARC: None

NTP: None

OSHA: None

Notes: Hydroquinone is classified as a category 2 carcinogen by the EU CLP. None of the other components of this product are listed as carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA, or the EU CLP.

Reproductive toxicity: None of the components are considered a reproductive hazard.

12. Ecological information

Aquatic toxicity, both acute and chronic: Hydroquinone: 96 hr LC50 Rainbow trout: 0.638 mg/L, 48 hr EC50 Daphnia magna: 0.134 mg/L, 48 hr NOEC Daphnia magna: 0.095 mg/L, 21 day NOEC Daphnia magna: 0.0057 mg/L

Bioaccumulative potential: No data available

Other adverse effects: This product is expected to be harmful to the aquatic environment. Releases to the environment should be avoided.

SAFETY DATA SHEET

Date issued : 02/27/2017
SDS number :11710500_90001 - ADHESIVE
Date revised : 07/24/2023
Revision number : 3

Comments: Persistence and Degradability: Hydroquinone: Readily biodegradable - 70% in 14 days.

13. Disposal considerations

Disposal methods: Dispose of in accordance with all local, state, and federal regulations.

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: NOT REGULATED

ICAO / IATA - air

UN proper shipping name: ID8000 CONSUMER COMMODITY, 9 (PKG LESS THAN OR EQUAL TO 30 kg G); UN3334, AVIATION REGULATED LIQUID, N.O.S. (CYANOACRYLATE ESTER), 9, III, (LTD QTY, IP VOL LESS THAN OR EQUAL TO 5.0 L, OP WGT LESS THAN OR EQUAL TO 30 kg G) **

IMO / IMDG - International

UN proper shipping name: NOT REGULATED

Comments:

* Exempt from HazMat in Non-Bulk Packaging

** This product may be shipped as EXCEPTED QUANTITIES OF CLASS 9, UN3334 (IP VOL LESS THAN OR EQUAL TO 0.03 L, OP VOL LESS THAN OR EQUAL TO 1.0 L)

The transport information provided in this section only applies to the material formulation/itself, and is not specific to any package/configuration. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organizations to follow all applicable laws, regulations, and rules relating to the transportation of the material.

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Fire Hazard

313 reportable ingredients: None

Title III notes: Section 302 Extremely Hazardous Substances (TPQ): Hydroquinone (500 lbs).

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA regulatory: This product has an RQ of 100,000 lbs (based on RQ of Hydroquinone of 100 lbs present at <0.1%). Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

TSCA (The Toxic Substances Control Act)

Chemical name	CAS No.
2-Methoxyethyl 2-cyanoacrylate	27816-23-5
Hydroquinone	123-31-9

TSCA Status: All components are listed on or are exempt from listing on the Toxic Substances Control Act.

California Proposition 65: This product does not contain substances known to the State of California to cause cancer and/or

SAFETY DATA SHEET

reproductive harm.

16. Other information

Approved by: Pacer Technology Regulatory Department

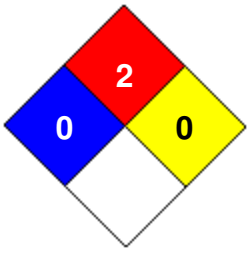
Prepared by: Pacer Technology Regulatory Department **Date revised:** 07/24/2023

Revision summary: This SDS replaces the 08/10/2017 SDS. Revised: **Section 1:** SDS number, Product code. **Section 2:** Classification of the substance or mixture, Label elements, Precautionary statement(s).

HMIS rating

Health	1
Flammability	2
Physical hazard	0
Personal protection	

NFPA codes



Manufacturer disclaimer: To the best of our knowledge, the information contained herein is accurate. However, Pacer Technology does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SAFETY DATA SHEET

Date issued : 02/27/2017
SDS number : 11710500_90001 - BATTERY
Date revised : 07/24/2023
Revision number : 3

1. Identification

Product code: 11710500_90001 - BATTERY
Product description: Z3 PACER ZAP IT TUBE 4GM (12) - BATTERY

Manufacturer / Supplier
Pacer Technology
3281 E. Guasti Road, Suite 260
Ontario, CA 91761
Emergency contact: Chemtrec
Emergency Phone: (800) 424-9300
Customer Service: (909) 987-0550

Emergency telephone number (24 hour)
CHEMTREC (800) 424-9300

2. Hazard identification

Classification of the substance or mixture

CONTACT WITH WATER RELEASES FLAMMABLE GASES WHICH MAY IGNITE SPONTANEOUSLY. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. HARMFUL IF SWALLOWED.

Health hazards:

Skin Irritation, Category 1
Acute Toxicity, Category 4

Physical hazards:

Water React., Category 1

Label elements

Note: If this product is a consumer product it is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.


Flame


Corrosion

Signal word: DANGER

Hazard statement(s)

H260: In contact with water releases flammable gases which may ignite spontaneously.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
EU014: Reacts violently with water.

Precautionary statement(s)

Prevention:

P223: Do not allow contact with water.
P264: Wash skin and hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor/physician.

SAFETY DATA SHEET

P370+P378: In case of fire: Use Lith-X powder, Class D fire extinguisher, Dry Lithium Chloride, or Graphite Powder for extinction.

Storage:

P402+P404: Store in a dry place. Store in a closed container.

Disposal:

P501: Dispose of contents through a licensed treatment, storage, disposal facility (TSDF).

Hazards not otherwise classified: If handled properly, there are no known serious health risks. Inhalation, absorption & ingestion are unlikely under normal conditions as the battery is hermetically sealed within the device. However, if the device is crushed, or compromised in a fire, contact with the lithium metal battery and material may cause damage to eyes & skin tissue as well as the nose, throat, lungs & respiratory tract if inhaled. Please strictly observe safety instructions.

The following statements apply to the contents of the lithium metal battery if it has been compromised (e.g., opened, crushed, or punctured). These statements do not apply to the hermetically sealed device which has not been damaged or compromised.
KEEP OUT OF REACH OF CHILDREN.
IF INGESTED: Call the NATIONAL BATTERY INGESTION HOTLINE at +1 (202) 625-3333 collect, day or night.
In Canada, call +1 (416) 813-5900.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Stainless steel	71.604	
Manganese dioxide	18.192	1313-13-9
Propylene carbonate	2.047	108-32-7
1-Propene. homopolymer	1.924	9003-07-0
1,2-Dimethoxyethane	1.545	110-71-4
Lithium metal	1.224	7439-93-2
Graphite (natural)	1.114	7782-42-5
Polytetrafluoroethylene	1.114	9002-84-0
Lithium perchlorate, anhydrous	0.77	7791-03-9

4. First-aid measures

Eye: Contents of an open battery can cause severe irritation. Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water, seek immediate medical attention.

Skin: Contents of an open battery can cause skin irritation. Remove contaminated clothing and flush affected areas. Wash thoroughly with soap and water.

Ingestion: Swallowing a battery can be harmful. 3 volt lithium coin batteries lodged in the esophagus should be removed immediately. Leakage, chemical burns and potential perforation can occur within hours of ingestion. Seek medical attention immediately. **Have physician call the NATIONAL BATTERY INGESTION HOTLINE for advice and follow-up at +1 (202) 625-3333 collect day or night.**

Inhalation: Remove victim to fresh air at once. If breathing is difficult, administer oxygen. If breathing stops give artificial respiration. keep person warm, quiet and get medical attention.

Most important symptoms and effects, both acute and delayed

Eye: Not anticipated under normal handling and use. If device is damaged, eye and mucous membrane irritation may occur

SAFETY DATA SHEET

following exposure of leaking battery.

Skin: Not anticipated under normal handling and use. Irritation may occur following exposure to leaking battery. Symptoms of skin overexposure may include redness, itching and irritation of affected areas.

Ingestion: Not anticipated under normal handling and use. Irritation to the internal/external mouth area may occur following exposure to leaking battery.

Inhalation: Not anticipated under normal handling and use. Respiratory irritation may occur if fumes are released due to heat or an abundance of leaking batteries. Respiratory irritation, headache, irritability may occur if fumes are released due to heat or an abundance of leaking batteries.

Acute effects: Non-irritating when used as directed. No acute health effects reported by the manufacturer.

Chronic effects: Non-irritating when used as directed. No chronic health effects reported by the manufacturer.

Additional information: Medical Conditions Aggravated by Exposure: An initial x-ray should be obtained promptly to determine battery location. Batteries lodged in the esophagus should be removed immediately since leakage, burns, and perforation can occur as soon as 4-6 hours after ingestion.

Comments: Device is hermetically sealed. Exposure to lithium battery component is not expected under normal conditions of use.

5. Fire-fighting measures

General hazard: As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products (See Section 2). Water will cool the fire but may react with available lithium n the batteries producing flammable hydrogen. DO NOT RECHARGE. As a typical sealed battery they may rupture when exposed to excessive heat. Rupture may expose lithium to moisture causing it to react or release flammable or corrosive materials. Do not accumulate undischarged batteries together. In case of fie where lithium batteries are present, flood area with water or smother with a Class D fire extinguisher appropriate for lithium metal, such as Lith-X. Virtually all fires involving lithium batteries can be controlled by flooding with water. However, the contents of the battery will react with water and form hydrogen gas. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recommended. A smothering agent will extinguish burning lithium batteries. Emergency Responders should wear self-contained breathing apparatus. Burning lithium manganese dioxide batteries produce toxic and corrosive lithium hydroxide fumes.

Suitable extinguishing media: Lith-X-Powder, Class D Fire Extinguisher, Dry Lithium Chloride, Graphite Powder.
Not flammable under normal conditions. However, battery will burn if involved in a fire. Call fire department. Cool exterior of battery if exposed to fire to prevent rupture. The electrolyte vapors generated by heat or fire are corrosive.

Fire fighting procedures: DO NOT USE WATER, moist sand, CO2, class ABC or soda ash extinguisher. When water is used hydrogen gas may be evolved which can form an explosive mixture with air. Keep containers cool until well after fire is out, do NOT use water. As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

6. Accidental release measures

General procedures: None under normal conditions. If the contents leak, observe the following instructions: Secure spill area and maximize ventilation. Stop spill or leak at source if safely possible. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective equipment to avoid breathing vapors or touching liquid. Recover or cover with inert absorbent material and place into appropriate container(s) for disposal. If in water remove if safe to do so. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers or any natural waterway or drinking supply. Spills are unlikely as the battery is enclosed hermetically sealed device. Keep spills and cleaning runoff out of drains, municipal sewers, and open bodies of water.

7. Handling and storage

SAFETY DATA SHEET

General procedures: DO NOT swallow, apply excessive force to the positive terminal, 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 when mounting, use different batteries together, touch any liquid that leaks from the battery, or hold the battery for an extended period.

Precautions for safe handling: Keep battery away from water.

Conditions for safe storage: Never store in hot or very humid place. Storage and handling areas should be equipped with proper containment to capture and neutralize spills. Do not expose to excessive physical shock or vibration. Storage and use areas should be equipped with eyewash stations and safety showers.

8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Manganese dioxide	**ACGIH TLV**	**TLV**		5
	OSHA PEL	**PEL**		5
1,2-Dimethoxyethane	**ACGIH TLV**	**TLV**	3	
Graphite (natural)	**ACGIH TLV**	**TLV**		2

Appropriate engineering controls: General mechanical (e.g., fans) or natural ventilation is sufficient when this product is in use. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). Upon completion of work activities involving large quantities of this product (fluid), wash any exposed areas thoroughly with soap and water.

Individual protection measures, such as personal protective equipment

Eye / face protection: Avoid eye contact. Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling this product. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. Have suitable eye wash and water available. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection - hand protection: Use gloves constructed of chemical-resistant material such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the appropriate standards of Canada, or the EU member states. Do not wear rings, watches or jewelry that could entrap the material against the skin.

Respiratory protection: No special respiratory protection is required under typical circumstances of use or handling. In instances where mist or vapors of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR 1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.

Skin protection - other: No apron required when handling sealed undamaged battery. Where contact is likely corrosive-resistant apron, clothing and boots. Protective clothing, if used, should include long-sleeves, apron, boots and additional facial protection. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.

9. Physical and chemical properties

Appearance: Hermetically sealed, metallic article.

Odor: None for sealed device.

Odor threshold: Not applicable

SAFETY DATA SHEET

pH: Not applicable

Melting point: Not applicable

Freezing point: Not applicable

Initial boiling point and boiling range: Not applicable

Flash point: Not applicable

Lower explosion limit / flammability limit: Not applicable

Vapor pressure: Not applicable

Relative vapor density: Not applicable

Relative density: 2 to 3.0

Solubility: Insoluble

Partition coefficient n-octanol/water (logarithmic value): Not applicable

Auto-ignition temperature: Not applicable

Decomposition temperature: Not applicable

Viscosity: Not applicable

10. Stability and reactivity

Reactivity: Stable under normal conditions; unstable with heat or contamination or if broken or leaking.

Dangerous polymerization: Will not occur.

Conditions to avoid: Prolonged overcharge; sources of ignition. Excess physical shock and vibration. Contact with organic materials, combustibles, strong reducing agents, strong oxidizers and humidity.

Hazardous decomposition products: Sulfur dioxide, hydrogen chloride, hydrogen.

Incompatible materials: Contact with organic materials, strong reducing agents, strong oxidizers, water and excessive humidity.

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)	LC_{50} (inhalation) mg/l
Manganese dioxide	> 3478 mg/kg		
Propylene carbonate	29100 uL/kg	> 20 mL/kg	> 5 g/m3

Carcinogenicity

Notes: Carbon Black is listed as IARC Group 2B (Possibly carcinogenic to humans); CA65 (cancer).

Reproductive toxicity: This product is not reported to produce reproductive toxicity in humans.

Comments: 1,2-Dimethoxyethane: LDLO (oral, rat): 1,000 mg/kg, LCLO (inh-6h, rat):63 g/m3

12. Ecological information

Other adverse effects: There is no specific data available for this product.

13. Disposal considerations

Disposal methods: Dispose of in accordance with federal, state, provincial, and local regulations.

14. Transport information

SAFETY DATA SHEET

Date issued : 02/27/2017
SDS number : 11710500_90001 - BATTERY
Date revised : 07/24/2023
Revision number : 3

USA Department of Transport Regulations (DOT)

UN proper shipping name: UN3091, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT, 9

DOT other shipping information: See 49 CFR 173.185

ICAO / IATA - air

UN proper shipping name: UN3091, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT, 9

Note: See Section II of Packing Instruction 970

IMO / IMDG - International

UN proper shipping name: UN3091, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT, 9,

Special provisions: See IMDG Code Special Provision 188

Comments: The transport information provided in this section only applies to the material formulation/itself, and is not specific to any package/configuration. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organizations to follow all applicable laws, regulations, and rules relating to the transportation of the material.

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

313 reportable ingredients: This product does not contain any substances subject to SARA Title III, Section 313 reporting requirements.

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA rq: Not applicable

TSCA (The Toxic Substances Control Act)

Chemical name	CAS No.
Manganese dioxide	1313-13-9
Propylene carbonate	108-32-7
1-Propene. homopolymer	9003-07-0
1,2-Dimethoxyethane	110-71-4
Lithium metal	7439-93-2
Graphite (natural)	7782-42-5
Polytetrafluoroethylene	9002-84-0
Lithium perchlorate, anhydrous	7791-03-9

TSCA Status: The components of this product are listed on the TSCA Inventory or are otherwise exempt.

Clean air act (hazardous air pollutants): Manganese (and its compounds) is listed as a Hazardous Air Pollutant (HAP). This product does not contain any Class 1 or Class 2 ozone depletors.

Regulations

State regulations: Note: Perchlorate Material - special handling may apply. For more information visit:
www.dtsc.ca.gov/hazardouswaste/perchlorate

SAFETY DATA SHEET

Date issued : 02/27/2017
SDS number : 11710500_90001 - BATTERY
Date revised : 07/24/2023
Revision number : 3

Clean water act: Manganese (and its compounds) is listed as Toxic Pollutants under the Clean Water Act (CWA).

CANADA

WHMIS Regulatory Status: None of the components of this product are listed on the Priorities Subtances list. WHMIS D2B (Other Toxic Effects)

16. Other information

Approved by: Pacer Technology Regulatory Department

Prepared by: Pacer Technology Regulatory Department **Date revised:** 07/24/2023

Revision summary: This SDS replaces the 02/11/2020 SDS. Revised: **Section 1:** SDS number, Product code. **Section 2:** Classification of the substance or mixture, Label elements, Precautionary statement(s).

HMIS rating

Health	1
Flammability	0
Physical hazard	1
Personal protection	B

NFPA codes

