



SAFETY DATA SHEET

1. Identification

Product identifier	Lithium Ion Battery (4780-0, 4780-1)
Other means of identification	Not available.
Recommended use	Sealed battery
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Nu-Calgon
Address	2611 Schuetz Road St. Louis, MO 63043 United States
Telephone	314-469-7000 / 800-554-5499
E-mail	Not available.
Emergency phone number	1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazard identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
WHMIS 2015 defined hazards	Not classified
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	This product is a manufactured article and is exempt.

US: As per OSHA, 1910.1200(b)(6)(v), articles are not regulated under HCS 2012.
As per OSHA Definitions: 1910.1200 (c). Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

CANADA: As per the Hazardous Products Act: A manufactured article means any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product.

3. Composition/Information on ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Aluminum		7429-90-5	1-5*
Carbonic Acid, Ethyl Methyl Ester		623-53-0	10-30*
Cobalt Lithium Manganese Nickel Oxide		182442-95-1	30-60*
Copper		7440-50-8	5-10*
Ethylene Carbonate		96-49-1	10-30*
Graphite		7782-42-5	10-30*
Phosphate(1-), Hexafluoro-, Lithium		21324-40-3	10-30*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

*This composition applies to the cell of the battery
US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Not a normal route of exposure. Inhalation of the ruptured battery vapors may be corrosive to the upper airways, cause a burning sensation in the nose, mouth and throat as well as leading to sneezing, coughing, breathing difficulties and chest pain. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	Not a normal route of exposure. Direct contact with the ruptured battery may cause chemical burns. Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact	Not a normal route of exposure. Direct contact with the ruptured battery may cause chemical burns. Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
Ingestion	Not a normal route of exposure. Direct contact with the ruptured battery may cause chemical burns. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Direct contact with the ruptured battery may cause chemical burns.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemical. Dry sand. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Battery may burst and release hazardous decomposition products when exposed to a fire situation. Some may burn but not ignite readily. Containers may explode when heated. Some may be transported hot.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of lithium. Oxides of phosphorus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	In the case of a leaking battery: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling	Do not puncture or incinerate container. Avoid short-circuiting the battery. Avoid mechanical damage to the battery. Do not open or disassemble. Battery may explode or cause burns if disassembled, crushed or exposed to fire or high temperatures. Do not install with incorrect polarity Do not immerse in liquids. Use good industrial hygiene practices in handling this material.
Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep this material away from food, drink and animal feed. Keep away from heat, sparks, and flame. Store in a cool dry place below 30°C (86°F) Do not store below -20°C.

8. Exposure controls/Personal protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3 10 mg/m3	Pyrophoric powder. Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0.2 mg/m3	Dust and mist. Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable.
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0.2 mg/m3	Dust and mist. Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0.2 mg/m3	Dust and mist. Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0.2 mg/m3	Dust and mist. Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3 10 mg/m3	Welding fume.
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0.2 mg/m3	Dust and mist. Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	15 minute	20 mg/m3	Dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value	Form
Copper (CAS 7440-50-8)	8 hour	10 mg/m3	Pyrophoric powder.
		5 mg/m3	Pyrophoric powder.
	15 minute	10 mg/m3	Dust.
		3 mg/m3	Dust and mist.
	8 hour	0.6 mg/m3	Fume.
		1 mg/m3	Dust and mist.
Graphite (CAS 7782-42-5)	15 minute	0.2 mg/m3	Fume.
		4 mg/m3	Respirable fraction.
	8 hour	2 mg/m3	Respirable fraction.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Ceiling	5 mg/m3	
Copper (CAS 7440-50-8)	PEL	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
Graphite (CAS 7782-42-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	15 mppcf	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3	Respirable.
		5 mg/m3	Welding fume or pyrophoric powder.
		10 mg/m3	Total
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	STEL	3 mg/m3	Fume.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	15 µg/l	Cobalt	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Not normally required when used as directed. Safety glasses if eye contact is possible.
Skin protection	
Hand protection	Not normally required when used as directed. Impervious gloves. Confirm with reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection	Not normally required if good ventilation is maintained.
Thermal hazards	Not applicable.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

9. Physical and chemical properties

Appearance	Cylinder
Physical state	Solid.
Form	Solid.
Color	Not available.
Odor	Odorless If leaking, smells of medical ether
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Insoluble
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	Reaction with water or moist air will release toxic, corrosive or flammable gases.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Heat, open flames, static discharge, sparks and other ignition sources. Humid air. Exposure to water or water vapor. Avoid direct sunlight. High temperatures.
Incompatible materials	Strong acids. Strong oxidizing agents. Conductive materials. Seawater.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of lithium. Oxides of phosphorus.

11. Toxicological information

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Information on likely routes of exposure

Ingestion Direct contact with the ruptured battery may cause chemical burns.

Inhalation No adverse effects due to inhalation are expected.
Inhalation of the ruptured battery vapors may be corrosive to the upper airways, cause a burning sensation in the nose, mouth and throat as well as leading to sneezing, coughing, breathing difficulties and chest pain.

Skin contact Direct contact with the ruptured battery may cause chemical burns.

Eye contact Direct contact with the ruptured battery may cause chemical burns. May cause blindness.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with the ruptured battery may cause chemical burns.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Aluminum (CAS 7429-90-5)		
Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Rat	> 0.9 mg/L, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, ECHA
Copper (CAS 7440-50-8)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Rat	> 5.1 mg/l/4h, ECHA
<i>Oral</i>		
LD50	Rat	300 - 500 mg/kg, ECHA
Ethylene Carbonate (CAS 96-49-1)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	> 730 mg/m3, 8 Hours, ECHA
<i>Oral</i>		
LD50	Rat	10400 mg/kg, ECHA
Graphite (CAS 7782-42-5)		
Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Rat	> 2000 mg/m3, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg, ECHA
Phosphate(1-), Hexafluoro-, Lithium (CAS 21324-40-3)		
Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	

Components	Species	Test Results
Oral LD50	Rat	50 - 300 mg/kg, ECHA
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Direct contact with the electrolyte may cause chemical burns.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization	The finished product is not expected to have chronic health effects.	
ACGIH sensitization		
Cobalt and inorganic compounds, as Co (CAS 182442-95-1)	Dermal sensitization	
	Respiratory sensitization	
Canada - Alberta OELs: Irritant		
Aluminum (CAS 7429-90-5)	Irritant	
Canada - Manitoba OELs Hazard: Dermal sensitization		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Dermal sensitization	
Canada - Manitoba OELs Hazard: Respiratory sensitization		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Respiratory sensitization	
Respiratory sensitization	The finished product is not expected to have chronic health effects.	
Skin sensitization	The finished product is not expected to have chronic health effects.	
Mutagenicity	The finished product is not expected to have chronic health effects.	
Carcinogenicity	The finished product is not expected to have chronic health effects. See below.	
ACGIH Carcinogens		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
California Proposition 65 - CRT: Listed date/Carcinogenic substance		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)		
Canada - Manitoba OELs: carcinogenicity		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Confirmed animal carcinogen with unknown relevance to humans.	
Canada - Quebec OELs: Carcinogen category		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Detected carcinogenic effect in animals.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	Not listed.	
US NTP Report on Carcinogens: Anticipated carcinogen		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Reasonably Anticipated to be a Human Carcinogen.	
US NTP Report on Carcinogens: Known carcinogen		
Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)	Known To Be Human Carcinogen.	
Reproductive toxicity	The finished product is not expected to have chronic health effects.	
Teratogenicity	The finished product is not expected to have chronic health effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not available.	

Chronic effects

The finished product is not expected to have chronic health effects.

12. Ecological information

Ecotoxicity See below**Ecotoxicological data****Components****Species****Test Results**

Aluminum (CAS 7429-90-5)

Aquatic

Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.16 mg/L, 96 hours
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Copper (CAS 7440-50-8)

Algae	IC50	Algae	0.048 mg/L, 72 Hours
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Crustacea	EC50	Daphnia	0.03 mg/L, 48 Hours
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Aquatic

Crustacea	EC50	Water flea (Daphnia magna)	0.036 mg/L, 48 hours
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Fish	LC50	Fathead minnow (Pimephales promelas)	0.032 - 0.054 mg/L, 96 hours
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Persistence and degradability No data is available on the degradability of this product.**Bioaccumulative potential** No data available.**Mobility in soil** No data available.**Mobility in general** Not available.**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.**Local disposal regulations** Dispose in accordance with all applicable regulations.**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.**General** Canada: See special provisions to determine the packaging requirements and exemptions for shipping lithium batteries.

US: See special provisions to determine the packaging requirements and exemptions for shipping lithium batteries.

U.S. Department of Transportation (DOT)**Basic shipping requirements:****UN number** UN3480/UN3481**Proper shipping name** Lithium ion batteries including lithium ion polymer batteries/Lithium ion batteries packed with equipment including lithium ion polymer batteries**Hazard class** 9**Marine pollutant** Yes**Transportation of Dangerous Goods (TDG - Canada)****Basic shipping requirements:****UN number** UN3480/UN3481**Proper shipping name** LITHIUM ION BATTERIES (including lithium ion polymer batteries)/LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT (including lithium ion polymer batteries);**Hazard class** 9



15. Regulatory information

Canadian federal regulations

This product is a manufactured article and is exempt.

As per the Hazardous Products Act: A manufactured article means any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product.

Canada CEPA Schedule I: Listed substance

Aluminum (CAS 7429-90-5) Listed.
Graphite (CAS 7782-42-5) Listed.

Canada Priority Substances List (Second List): Listed substance

Aluminum (CAS 7429-90-5) Listed.
Graphite (CAS 7782-42-5) Listed.

Canada SNAc Reporting Requirements: Listed substance/Publication date

Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1) 01/21/2012 Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions

Not applicable

US federal regulations

This product is a manufactured article and is exempt.

As per OSHA Definitions: 1910.1200 (c). Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1) 0.1 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper (CAS 7440-50-8) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Aluminum	7429-90-5	1-5*
Copper	7440-50-8	5-10*

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Hazardous substance
Section 112(r) (40 CFR Priority pollutant
68.130) Toxic pollutant

US state regulations

US - California Hazardous Substances (Director's): Listed substance

Aluminum (CAS 7429-90-5) Listed.
 Copper (CAS 7440-50-8) Listed.
 Graphite (CAS 7782-42-5) Listed.

US - Illinois Chemical Safety Act: Listed substance

Copper (CAS 7440-50-8)

US - Louisiana Spill Reporting: Listed substance

Copper (CAS 7440-50-8) Listed.

US - Michigan Critical Materials Register: Parameter number

Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)
 Copper (CAS 7440-50-8)

US - Minnesota Haz Subs: Listed substance

Aluminum (CAS 7429-90-5) Listed.
 Copper (CAS 7440-50-8) Listed.
 Graphite (CAS 7782-42-5) Listed.

US - North Carolina Toxic Air Pollutants: Listed substance

Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)

US - Texas Effects Screening Levels: Listed substance

Aluminum (CAS 7429-90-5) Listed.
 Copper (CAS 7440-50-8) Listed.
 Ethylene Carbonate (CAS 96-49-1) Listed.
 Graphite (CAS 7782-42-5) Listed.
 Phosphate(1-), Hexafluoro-, Lithium (CAS 21324-40-3) Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)

US. Massachusetts RTK - Substance List

Aluminum (CAS 7429-90-5)
 Copper (CAS 7440-50-8)
 Ethylene Carbonate (CAS 96-49-1)
 Graphite (CAS 7782-42-5)

US. New Jersey Worker and Community Right-to-Know Act

Aluminum (CAS 7429-90-5)
 Copper (CAS 7440-50-8)
 Graphite (CAS 7782-42-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Aluminum (CAS 7429-90-5)
 Cobalt Lithium Manganese Nickel Oxide (CAS 182442-95-1)
 Copper (CAS 7440-50-8)
 Ethylene Carbonate (CAS 96-49-1)
 Graphite (CAS 7782-42-5)

US. Rhode Island RTK

Aluminum (CAS 7429-90-5)
 Copper (CAS 7440-50-8)
 Graphite (CAS 7782-42-5)

US. California Proposition 65

This component is listed on Prop 65 under the category Nickel Compounds - May 7, 2004



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

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cobalt Lithium Manganese Nickel Oxide (CAS Listed: May 7, 2004
 182442-95-1)

Inventory status

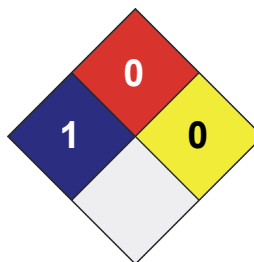
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



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Further information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.