

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 14, 2019

1 Identification

- **Product identifier**
- **Trade name:** Lithium Metal Battery in/with Shaver/Trimmer (8510.10)
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Lithium-based battery product.
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Wahl Clipper Corporation
2900 N. Locust Street
Sterling, IL 61081 USA
Phone: (815) 625-6525
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)



2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
Repr. 1B H360 May damage fertility or the unborn child.
- **Additional information:**
Note: Leaking cells pose health hazards: see Sections 4 and 11. Intentional abuse of cells or batteries increases the risk of harm or damage to the product, to the user, and to surrounding materials and personnel. Do not attempt to open sealed cells or batteries. Do not intentionally short-circuit cells or batteries. Do not expose these products to temperatures exceeding the maximum manufacturers rating. Do not dispose of cells/batteries in landfills. Please follow all manufacturer guidelines in the use, storage, and disposal of these products. Consult manufacturer in cases of questions involving specific product usage.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

 Two GHS hazard pictograms: GHS05 (Corrosion) and GHS08 (Health Hazard).
- **Signal word:** Danger
- **Hazard statements:**
H314 Causes severe skin burns and eye damage.
H360 May damage fertility or the unborn child.
- **Precautionary statements:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

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P260 Do not breathe mist/vapors/spray.
 P264 Wash thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection.
 P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a poison center/doctor.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

182442-95-1	cobalt lithium manganese nickel oxide  Acute Tox. 2, H330  Carc. 1A, H350; STOT RE 1, H372	0-45%
12190-79-3	Lithium cobalt oxide  Carc. 2, H351; Repr. 2, H361	0-40%
7782-42-5	Graphite	<30%
21324-40-3	Lithiumhexafluorophosphat(1-)  Acute Tox. 3, H301; Acute Tox. 3, H331  STOT RE 1, H372  Skin Corr. 1A, H314; Eye Dam. 1, H318	<20%
7440-50-8	Copper	≤10%
7429-90-5	Aluminum	<10%
7440-02-0	Nickel	≤5%
1333-86-4	Carbon black	<5%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Information is only applicable to product contents, and not to product as normally supplied. This information is applicable to damaged, leaking, or spilled product as contact with contents is possible under these conditions.

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- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After skin contact:**
Immediately remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment in case of complaints.
Seek immediate help for blistering or open wounds.
- **After eye contact:**
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Headache
Breathing difficulty
Coughing
Nausea
Gastric or intestinal disorders
Vomiting.
Diarrhea.
Caustic effect on skin and mucous membranes.
Causes serious eye irritation.
- **Danger:**
Danger of disturbed cardiac rhythm.
Danger of convulsion.
May damage fertility or the unborn child.
- **Indication of any immediate medical attention and special treatment needed:**
Monitor circulation, possible shock treatment.
Medical supervision for at least 48 hours.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Graphite powder.
Copper powder.
Water in flooding quantities.
Fire-extinguishing powder
Sand
ABC powder
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

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- **Additional information:** Cool endangered receptacles with water in flooding quantities.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
If containers are leaking, use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions** Avoid release to the environment.
- **Methods and material for containment and cleaning up**
Absorb liquid components with liquid-binding material.
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Keep away from open flames or temperatures exceeding manufacturer ratings. DO NOT ATTEMPT TO OPEN SEALED CELLS OR BATTERIES – BATTERY CONTENTS MAY PRESENT SERIOUS SAFETY AND HEALTH HAZARDS. SHORT-CIRCUITING THE TERMINALS OF A DEVICE MAY RESULT IN DAMAGE TO DEVICE AND ANY NEARBY OBJECTS OR PERSONNEL.
- **Information about protection against explosions and fires:**
Protect from heat.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
Store in a dry, well-ventilated place.
Do not use or store near open flame.
Avoid extreme temperatures; battery may rupture and release contents.
Do not store and transport with incompatible materials.
Store individual batteries or cells only in approved packaging in order to avoid inadvertent short circuits, as this may result in damage to device, nearby objects, personnel, or all of the above.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from water.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

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Components with limit values that require monitoring at the workplace:

7782-42-5 Graphite

PEL (USA)	Long-term value: 15 mppcf* mg/m ³ *impinger samples counted by light field techn.
REL (USA)	Long-term value: 2.5* mg/m ³ *respirable dust
TLV (USA)	Long-term value: 2* mg/m ³ all forms except graphite fibers;*resp. fraction
EL (Canada)	Long-term value: 2 mg/m ³ respirable
EV (Canada)	Long-term value: 2 mg/m ³ respirable
LMPE (Mexico)	Long-term value: 2* mg/m ³ *fracción respirable

7440-50-8 Copper

PEL (USA)	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL (USA)	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV (USA)	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu
EL (Canada)	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume, as Cu
EV (Canada)	Long-term value: 0.2* 1** mg/m ³ as copper, *fume;**dust and mists
LMPE (Mexico)	Long-term value: 0.2* 1** mg/m ³ *humo (como Cu);**polvo y niebla (como Cu)

7429-90-5 Aluminum

PEL (USA)	Long-term value: 15*; 5** mg/m ³ *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m ³ as Al; *as respirable fraction
EL (Canada)	Long-term value: 1.0 mg/m ³ respirable, as Al
EV (Canada)	Long-term value: 5 mg/m ³ aluminium-containing (as aluminium)
LMPE (Mexico)	Long-term value: 1* mg/m ³ A4, *fracción respirable

7440-02-0 Nickel

PEL (USA)	Long-term value: 1 mg/m ³
REL (USA)	Long-term value: 0.015 mg/m ³ as Ni; See Pocket Guide App. A
TLV (USA)	Long-term value: 1.5* mg/m ³

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EL (Canada)	elemental, *inhalable fraction Long-term value: 0.05 mg/m ³ ACGIH A1, IARC 2B
EV (Canada)	Long-term value: 1 mg/m ³ Inhalable fraction
LMPE (Mexico)	Long-term value: 1.5* mg/m ³ *elemental:A5, fracción inhalable

1333-86-4 Carbon black

PEL (USA)	Long-term value: 3.5 mg/m ³
REL (USA)	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV (USA)	Long-term value: 3* mg/m ³ *inhalable fraction
EL (Canada)	Long-term value: 3 mg/m ³ IARC 2B
EV (Canada)	Long-term value: 3.5 mg/m ³
LMPE (Mexico)	Long-term value: 3* mg/m ³ A3, *fracción inhalable

- **Exposure controls**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
 - Not required under normal conditions of use.
 - For spills, respiratory protection may be advisable.
- **Protection of hands:**
 - Not required under normal conditions of use.
 - Wear protective gloves to handle contents of damaged or leaking units.
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
 - Butyl rubber, BR
 - Nitrile rubber, NBR
 - Natural rubber, NR
 - Neoprene gloves
 - Fluorocarbon rubber (Viton)
- **Eye protection:**
 - Not required for normal handling. Wear protective eyewear while handling damaged or leaking product.
- **Body protection:**
 - Protective work clothing
 - Protection may be required for spills.
- **Limitation and supervision of exposure into the environment**
 - Avoid release to the environment.
- **Risk management measures** No relevant information available.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Solid
Color: According to product specification

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not determined.

· Auto-ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Not determined.

· Explosion limits

Lower: Not determined.

Upper: Not determined.

· Oxidizing properties: Non-oxidizing.

· Vapor pressure: Not applicable.

· Density:

Relative density: Not determined.

Vapor density: Not applicable.

Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not applicable.

Kinematic: Not applicable.

· Other information: No relevant information available.

10 Stability and reactivity

· **Reactivity:** No relevant information available.

· **Chemical stability:**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Stable at ambient temperature.

To avoid thermal decomposition, do not overheat.

· **Possibility of hazardous reactions**

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Hazardous reactions generally occur with contents of leaking batteries only.
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong acids and oxidizing agents.
Reacts with strong alkali.
Contact with water releases flammable gases.

· **Conditions to avoid**

Excessive heat.
Avoid acids.
Store away from oxidizing agents.
Moisture.

· **Incompatible materials**

Oxidizers, strong bases, strong acids
Water

· **Hazardous decomposition products**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Toxic metal oxide smoke

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

21324-40-3 Lithiumhexafluorophosphat(1-)

Oral	LD50	>50-300 mg/kg (rat)
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· **Primary irritant effect:**

· **On the skin:**

None from normal handling. Symptoms only seen in exposure to leaking articles.
Caustic effect on skin and mucous membranes.

· **On the eye:**

None from normal handling. Symptoms only seen in exposure to leaking articles.
Causes serious eye damage.

· **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**

12190-79-3	Lithium cobalt oxide	2B
7440-02-0	Nickel	2B
1333-86-4	Carbon black	2B
182442-95-1	cobalt lithium manganese nickel oxide	1

· **NTP (National Toxicology Program):**

182442-95-1	cobalt lithium manganese nickel oxide	K
7440-02-0	Nickel	R

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Information references exposures to battery contents, and not exposures to whole units. Exposures to whole units are unlikely to produce health hazards.

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Eye contact.

Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:**
None from normal handling. Symptoms only seen in exposure to leaking articles.
May damage fertility or the unborn child.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:** Avoid transfer into the environment.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Contact waste processors for recycling information.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|--|
| · UN-Number | |
| · DOT, ADR/RID/ADN, IMDG, IATA | UN3091 |
| · UN proper shipping name | |
| · DOT, ADR/RID/ADN, IMDG, IATA | LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT / LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT |
| · Transport hazard class(es) | |

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· DOT, ADR/RID/ADN, IMDG, IATA



· Class 9
· Label 9

· Packing group This UN-number is not assigned a packing group.

· Environmental hazards

· Marine pollutant: No

· Special precautions for user Warning: Miscellaneous dangerous substances and articles

· EMS Number: F-A,S-I

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information: This battery has passed the test requirements according to the UN Manual of Tests and Criteria Part III, Subsection 38.3
Lithium content: $\leq 1g$



Lithium Battery Mark

· DOT See 173.185 for exceptions.

· ADR/RID/ADN See Special Provision 188 for exceptions.

· IMDG See Special Provision 188 for exceptions.

· IATA
Dangerous Goods Regulations 60th Edition
Lithium ion batteries contained in equipment: Packing Instruction 970 Section II
Lithium Ion batteries packed with equipment: Packing Instruction 969 Section II

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· United States (USA)

· SARA

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

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· **Section 313 (Specific toxic chemical listings):**

182442-95-1	cobalt lithium manganese nickel oxide
12190-79-3	Lithium cobalt oxide
7440-50-8	Copper
7429-90-5	Aluminum
7440-02-0	Nickel

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

182442-95-1	cobalt lithium manganese nickel oxide
7440-02-0	Nickel
1333-86-4	Carbon black

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **EPA (Environmental Protection Agency):**

7440-50-8	Copper	D
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· **IARC (International Agency for Research on Cancer):**

182442-95-1	cobalt lithium manganese nickel oxide	1
12190-79-3	Lithium cobalt oxide	2B
7440-02-0	Nickel	2B
1333-86-4	Carbon black	2B

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed or exempt.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association Dangerous Goods Regulations 60th Edition
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 OSHA: Occupational Safety & Health Administration
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 2: Acute toxicity – Category 2

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Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Carc. 1A: Carcinogenicity – Category 1A
Carc. 2: Carcinogenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 2: Reproductive toxicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor-internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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