

Safety Data Sheet



According to the Occupational Safety and Health Standards Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Trade name: Lithium-Ion Battery for ACD-200 Bobcat

Product No: AC01054

Print date: 09.18.19

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Revision date:

SECTION 1: Identification

1.1 **Product identifier:** Lithium Ion Battery for the ACD-200 Bobcat™ Air Sampler

The batteries referenced herein are exempt articles and are not subject to OSHA Hazard Communication Standard requirements. This entire document is provided solely as an information source for the purpose of assisting our customers.

According to OSHA Regulation (29 CFR 1910.1200), Canadian WHMIS or GHS requirements, and REACH regulation (EC 1907/2006, Art 31), batteries have been defined as an 'ARTICLES', with no intended release. OSHA has defined an 'article' as 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 minute or trace amounts of a hazardous chemical and does not pose a physical hazard or health risk to employees. Because all of our batteries are defined as "articles", they are exempt from the legal requirements of the Hazard Communication Standard to provide an SDS or MSDS.

1.3 **Details of the supplier of the safety data sheet:**

Supplier:

InnovaPrep LLC
132 East Main Street
Drexel, MO 64742
816-619-3375
info@innovaprep.com

1.4 **EMERGENCY TELEPHONE NUMBER:**

Emergency Phone: For hazardous or Dangerous Goods incident - spill, leak, fire, exposure, or accident call InnovaPrep Environmental Health and Safety: 816-506-2843

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture:**

Lithium Ion Battery: (Carbon/Lithiated Metal Oxide)

NSN: 6140-01-490-4316

Nominal Weight: 3.2 lbs (1.45 kg)

Nominal Voltage: 28.8V

Max energy of Alternates: 294 Wh

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2.2 Label elements

Signal word: Warning

Hazard statements:

All Chemicals are potentially dangerous. They should be handled by specially trained personnel.

SECTION 3. Composition/information on ingredients

3.1 Substances

Substance name	CAS No.	%
Aluminum foil	7429-90-5	0.1-1 w/w
Biphenyl (BP)	92-52-4	0 -0.3 w/w
Copper foil	7440-50-8	0.1 -0.3 w/w
Dioxathiolane 2,2-Dioxide (DTD)	1072-53-3	0 -3 w/w
Linear and Cyclic Carbonic Solvents	N/APP	5 -17 w/w
Graphite Powder	7440-44-0	10-30 w/w
Lithium Carbonate	554-13-2	0 -0.3 w/w
Lithium cobaltite (LiCoO ₂)	12190-79-3	01-3- w/w
Lithium hexafluorophosphate (LiPF ₆)	21324-40-3	1-5 w/w
Poly (vinylidene fluoride) (PVDF)	24937-79-9	0.1 -1 w/w
Propane Sultone (PS)	1120-71-4	0-3 w/w
Steel, nickel and inert polymer	N/APP	Balance

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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. The most likely risk is acute exposure when a cell vents. Propylene Carbonate is mildly irritating upon eye and skin contact. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

Inhalation: Inhalation or ingestion of lithium trifluoromethane sulfonate may be harmful.

Skin contact: May irritate skin. Immediately wash with soap and water.

Eye contact: If battery is leaking and material comes in contact with eyes, flush with copious amounts of clear, tepid water for 30 minutes assure adequate flushing by separating the eyelids with fingers. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

No further information available

4.3 Indication of any immediate medical attention and special treatment needed

No further information available

SECTION 5: Firefighting measures

5.1 Extinguishing

Suitable extinguishing media: Water spray, Carbon Dioxide, dry chemical powder or appropriate foam. Use agent appropriate for surrounding materials.

Unsuitable extinguishing media: No further information available.

5.2 Special hazards arising from the substance or mixture

Organic compounds will burn if incinerated. Combustion of cell contents will cause evolution of extremely corrosive Hydrogen Fluoride Gas.

5.3 Precaution for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. May intensify fire; oxidizer.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No specific measures necessary.

6.2 Environmental precautions:

No specific measures necessary.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures: Do not disassemble

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Store batteries below 70°F (21°C), in a dry area that is subject to minimal temperature variations.

7.3 Specific end uses

Battery power for the ACD-200 Bobcat Air Sampler

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SECTION 8: Exposure controls/personal protection

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.1 Control parameters

8.2 Exposure controls

Personal protective equipment: The usual precautionary measures are to be adhered to when handling chemicals.

Eye / Face protection: Use safety glasses. Ensure that eyewash stations and safety showers are proximal to the work station.

Skin protection: Gloves and laboratory coat

Respiratory protection: Not applicable

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Form: Rectangular box shape

SECTION 10: Stability and reactivity

10.1 Chemical stability:

Stable under recommended storage conditions

10.2 Possibility of hazardous reactions:

Reacts with oxidizing agents, acids

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10.3 Conditions to avoid:

Do not heat, crush, disassemble, or short-circuit.

10.4 Incompatible materials:

No data available.

10.5 Hazardous decomposition products:

Thermal degradation may produce hazardous fumes of manganese and lithium; hydrofluoric acid; oxides of carbon and sulfur and other toxic by-products.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No data available.

SECTION 12: Ecological information

12.1 Toxicity:

No data available.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

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12.6 Other adverse effects:

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Product: Batteries must be completely discharged prior to disposal and/or the terminals must be taped or capped to prevent short circuit.

Container: Dispose according to all federal, state and local applicable regulations. Consult your local or regional authorities.

SECTION 14: Transport information

This battery is regulated as a Class 9 Miscellaneous hazardous material (dangerous goods). UN3480. The Max Watt-hour rating of included alternates is 294 Wh. The battery and component cells conform to the requirements of Section 38.3 of the UN manual of Tests and Criteria (T1-T8 tests).

14.1 Land transport DOT:

Domestic Transportation Within U.S. by Highway and Rail Only for Lithium ion Batteries | > 100 Wh to ≤ 300 Wh. See 49 CFR 173.185(c)(1)(iv).

“Excepted” from the U.S. Hazardous Materials Regulations if the following requirements are met: Battery must be shipped by highway or rail only, packaged in a manner to prevent short circuits and packed in a strong outer packaging. Package must be marked with the lithium battery handling marking shown on the right and “LITHIUM BATTERIES – FORBIDDEN FOR TRANSPORT ABOARD AIRCRAFT AND VESSEL.” (Letters must be a minimum of 0.25” in height.)

Shipment must be accompanied with a document indicating that the package contains a lithium ion battery; the package must be handled with care and that a flammable hazard exists if the package is damaged; special procedures must be followed in the event the package is damaged, to include inspection and repacking, if necessary; and a telephone number for additional information. Package must be capable of passing a 1.2 meter drop test and the gross weight of package may not exceed 30 kg (66 lbs).



NOTE – Effective 01 Apr 2016, for air transport, all Li-Ion batteries can only be charged to 30% max, shipped cargo aircraft only, and have CAO label on package. Shipping on passenger aircraft is forbidden.

14.2 Air transport: IATA

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Within the USA: See 49 CFR 173.185(b). Package must be labeled and marked and accompanied by hazardous materials shipping paper or Shipper's Declaration for Dangerous Goods according to 49 CFR 172. Net weight of batteries per package may not exceed 35kg and must ship on cargo aircraft.

No weight limit for highway, rail and sea transport with adequately rated UN specification packaging. If battery is "packed with" or "contained in" equipment, see requirements for UN3481. Employees must receive hazardous materials training in accordance with 49 CFR requirements.

International Transportation: All Modes – ADR/RID, IMDG Code, IATA Dangerous Goods

Regulations and ICAO Technical Instructions (Packing Instruction 965, Section IA).

Similar requirements to those listed in paragraph B. above. Battery must be offered as fully-regulated Class 9 dangerous goods/UN3480. Shipper must comply with applicable packaging requirements in international dangerous goods regulations (e.g., IATA Packing Instruction 965, Section IA and IMDG Code, Packing Instruction P903). Package must be labeled and marked according to applicable regulations and accompanied by a Shipper's Declaration for Dangerous Goods. Net weight of batteries per package may not exceed 35 kg & must ship on cargo aircraft. No weight limit for highway, rail and sea transport with adequately rated UN specification packaging. If battery is "packed with" or "contained in" equipment, see requirements for UN3481. Employees must receive dangerous goods training in accordance with applicable regulations.

14.3 Sea transport MTS:

14.4 Special precautions for users:

Not applicable

SECTION 15: Regulatory information

Batteries are considered to be "articles" and thus are exempt from TSCA regulation.

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

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2 Chemical Safety Assessment

No further information.

SECTION 16: Other information

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Avoid mechanical or electrical abuse. DO NOT short circuit or install incorrectly. Batteries may explode, pyrolize or vent if disassembled, crushed, recharged incorrectly or exposed to high temperatures. Install batteries in accordance with equipment instructions.

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