



Product Data Sheet

Rechargeable Lithium Ion Battery

Print Date:
4/13/2022

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The products referenced herein are 'articles' and are not subject to requirements for material safety data sheets. This Product Data Sheet is provided as a service to our customers.

1. Product and Company Identification

Identity: Rechargeable Lithium Ion Battery
Models: All
Effective: March 20, 2019

Manufacturer:
BISSELL Homecare, Inc.
PO Box 1888
Grand Rapids, MI 49501
Phone: 1-616-453-4451

2. Composition information

BISSELL battery packs contain lithium ion cells from various manufactures. Li-ion cells are generally composed of the following major ingredients

| | Chemical Name | CAS No. | *Mass range in cell (g/g %) |
|---------------------|--|---------------------------------|------------------------------------|
| Cathode | Lithium cobalt oxide | 12190-79-3 | 20-50 |
| Anode | Graphite | 7782-42-5 | 10-30 |
| Binder | Polyvinylidene fluoride | 24937-79-9 | <1 |
| Electrolyte salt | Lithium hexafluorophosphate | 21324-40-3 | 0.05-5 |
| Electrolyte solvent | Includes one or more of the following: Ethylene Carbonate Propylene Carbonate Diethyl Carbonate | 96-49-1 108-32-7 105-58-8 | 5-20 |
| Other Components | Copper | 7440-50-8 | 3-15 |
| | Aluminum | 7429-90-5 | 2-10 |
| | Steel, Nickel, and inert components | Various | Balance |

As manufactured, Li-ion cells do not contain lithium metal

3. Hazards Identification

Potentially hazardous materials are fully contained in hermetically sealed case designed to withstand normal handling and use. Exposure could only occur if the battery or cells have been opened, disassembled, crushed, burned, exposed to high temperatures (> 60C or 140F), or subject to other types of abuse. Exposure to the cell contents may be harmful under some circumstances.

Follow instructions and precautions for safe use of the battery pack.

4. First Aid Measures

Cell manufacturers recommend that in case of exposure to the cell contents, wash affected area for at least 15 minutes with generous amounts of water and seek medical attention.

5. Fire Fighting Measures

Fires involving these types of battery packs should be flooded with water or use CO₂, foam or dry chemical extinguishing media. Fires involving large quantities of batteries may produce toxic, corrosive, or irritating fumes including hydrogen fluoride (HF)



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6. Accidental Release Measures

If batteries are spilled and damaged, they should be disposed according to the disposal section.

7. Handling and Storage

The battery pack and enclosed cells should not be opened, disassembled, crushed, burned, or exposed to high temperatures (> 60°C or 140°F).

8. Exposure controls/personal protection

No personal protection is required during normal handling and use. Exposure to the ingredients contained within the cells within the battery pack could be harmful under some circumstances. In case of exposure to the cell contents, wash affected area for at least 15 minutes with generous amounts of water and seek medical attention.

9. Physical and Chemical Properties

These batteries are solid articles. Properties such as odor, pH, vapor pressure, solubility, etc. are not applicable.

10. Stability and Reactivity

| | |
|----------------------------------|--|
| Reactivity | None during normal handling and use |
| Incompatibility | None during normal handling and use |
| Hazardous decomposition products | None during normal handling and use |
| Conditions to avoid | The battery pack and enclosed cells should not be opened, disassembled, crushed, burned, or exposed to high temperatures |

11. Toxicological Information

There are no known toxicological properties of the batteries during normal handling and use.

12. Ecological Information

There are no known ecological risks of the batteries during normal handling and use.

13. Disposal

Lithium ion battery packs should be disposed of or recycled in accordance with any applicable national, state/provincial, and local requirements. BISSELL is a Licensee of the Call2Recycle Battery Recycling Program, please call 1-800-8-BATTERY or go to the Call2Recycle website at www.call2recycle.org for how to recycle our product. Do not dispose of in fire.



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14. Transport

UN3480, Lithium Ion Batteries

UN3481, Lithium Ion Batteries contained in equipment

UN3481, Lithium Ion Batteries packed with equipment

The Watt-hour rating for all BISSELL Homecare, Inc. lithium ion products is less than 20 Watt-hours for cells and less than 100 Watt-hours for batteries.

When packaged and shipped by BISSELL Homecare, Inc., these batteries are tested, packaged and labeled in accordance with all applicable requirements for transport by mode of shipment (air, sea or ground), as follows:

- 1) International Air Transport Association (IATA), International Civil Aviation Organization (ICAO) Technical Instructions Dangerous Goods Regulation 59th Edition 2018 and Special Provision 188:
 - a. PI 965 Section IB or Section II (UN 3480, batteries), including 30% state of charge maximum limit addendum
 - b. PI 966 Section II (UN 3481, batteries packed with equipment), and 967 Section II (UN 3481, batteries contained in equipment);
- 2) International Maritime Dangerous Goods (IMDG 2017, Special Provision 188 Amendment 38-16)
- 3) U.S. Department of Transportation (DOT) 49 CFR 173.185 and Special Provision 188;
- 4) European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2017) Special Provisions 188 and 230

All BISSELL Homecare, Inc. Li-Ion batteries have been tested in accordance with the UN Manual Tests and Criteria, Part III, Subsection 38.3.

For transportation emergencies involving BISSELL Homecare, Inc. battery products, call CHEMTREC at 1-800-424-9300.

15. Regulatory Information

The products referenced herein are 'articles' and are not subject to requirements for material safety data sheets

16. Other Information

Notice: The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. BISSELL Homecare, Inc. makes no warranty or implied with respect to this information and recommendations and disclaims all liability from reliance on it.

"Equivalent lithium content" information is available from the manufacturer.