Product Data Sheet
Rechargeable Lithium Ion Battery

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 / Supplier:

BISSELL Homecare, Inc. Grand Rapids, MI 49544 USA Tel: +1(616) 453- 4451	In Australia & New Zealand, distributed by: BISSELL Australia PTY Ltd 789 Springvale Road, Mulgrave 3170, Victoria, Australia Australia Tel: 1300 247 735 New Zealand: 0800 247 735	In Europe and the United Kingdom, distributed by: BISSELL International Trading Company BV Postbus 12874, 1100 AW Amsterdam Zuidoost, The Netherlands EU Tel: 31-20-305-1340 UK Tel: 0344-888-6644	In the Middle East & Africa, distributed by: BISSELL Middle East FZE Dubai, United Arab Emirates Tel: 971-4-881-8597

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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	Polyvinylidenfluoride	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 with stand normal handling and use. Exposure could only occur if the battery or cells have been opened, disassemble, 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)

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 (> 60ºC or 140ºF).

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.

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 BISELL 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.