



Product Name: Back-Pack™ Mini Jump Starter
(Li-ion Battery)
Revision Date: March 31, 2016
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SAFETY DATA SHEET

NO.: ESTSZI40302238MS-I

Safety Data Sheet
for
Back-Pack™ Mini Jump Starter (Li-ion Battery)
Model No.: CP-03

Applicant:	Ballistic Performance Components
Address:	1404 Pilgrim Road Plymouth, WI 53073



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Section I: Chemical Product and Company Identification

Product Name: Back-Pack™ Mini Jump Starter (Li-ion Battery)
Model No: CP-03
Trademark: RTB
Manufacturer/supplier: Ballistic Performance Components
Address: 1404 Pilgrim Road
Plymouth, WI 53073
Telephone: (920) 545-4956
Fax: (843) 771-0421

This MSDS was prepared by Ballistic Performance Components
Item Number: ESTSZI40302238MS-I

Section 2: Composition / Information on Ingredients

• **Battery is a mixture:**

Chemical Name	Chemical Formula or Abbreviation	CAS No.	Content (wt%)
Lithium Cobalt Oxide	LiCoO ₂	12190-79-3	30-50
Carbon / Graphite	C	7782-42-5	15-25
Aluminum Foil	Al	7429-90-5	3-10
Copper Foil	Cu	7440-50-8	7-14
PVDF (Polyvinylidene Fluoride)	(C ₂ H ₂ F ₂) _n	24937-79-9	3-8
Electrolyte	--	21324-40-3	10-20
Al Lamination Film	--	7429-90-5	<8

Section 3: Hazards Identification

• **Preparation hazards and classification:**

Not dangerous with normal use. Do not dismantle, open or shred Li-ion battery. Exposure to the ingredients contained within or their ingredients products could be harmful.

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- **Appearance, Color, and Odor:**

Solid object with no odor, no color.

- **Primary Route(s) of Exposure:**

These chemicals are contained in a sealed stainless steel enclosure. Risk of exposure occurs only if the cell is mechanically, thermally, or electrically abused to the point of compromising the enclosure. If this occurs, exposure to the electrolyte solution contained within can occur by inhalation, ingestion, eye contact and skin contact.

- **Potential Health Effects:**

Acute (short term): see Section 8 for exposure controls. In the event that this battery has been ruptured, the electrolyte solution contained within the battery would be corrosive and can cause burns.

Inhalation: Inhalation of materials from the sealed battery is not an expected route of exposure. Vapors or mists from a ruptured battery may cause respiratory irritation.

Ingestion: Swallowing of materials from a sealed battery is not an expected route of exposure. Swallowing the contents of an open battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

Skin: Contact between the battery and skin will not cause any harm. Skin contact with contents of an open battery can cause severe irritation or burns to the eye.

Eye: Contact between the battery and the eye will not cause any harm. Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

Chronic (long term): see Section II for additional toxicological data.

- **Medical Conditions Aggravated by Exposure:** Not applicable.

- **Reported as Carcinogen:** Not applicable.

Section 4: First Aid Measures

- **After inhalation:**

If contents of an opened battery are inhaled, remove source of contamination or move victim to fresh air. Obtain medical advice.

- **After skin contact:**

If skin contact with contents of an open battery occurs, as quickly as possible remove contaminated clothing, shoes, and leather goods. Immediately flush with lukewarm, gently flowing water for at least 30 minutes. If irritation or pain persists, seek medical attention. Completely decontaminate clothing, shoes and leather goods before reuse or discard.

- **After eye contact:**

If eye contact with contents of an open battery occurs, immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes while holding the eyelids open. Neutral saline solution may be used as soon as it is available. If necessary, continue flushing during transport to emergency care facility. Take care not to rinse contaminated water into the unaffected eye or onto face. Quickly transport victim to an emergency care facility.

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- **After swallowing:**

If ingestion of contents of an open battery occurs, never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 60 to 240 mL (2-8 oz.) of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again.

Section 5: Fighting Measures

- **Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.
Water, Dry Chemical, Carbon Dioxide, Foam

- **Protective equipment:**

Mouth respiratory protective device. Wear fully protective suit.

Section 6: Accidental Release Measures

- **Personal precautions, protective equipment, and emergency procedures:**

Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipments as indicated in Section 8.

- **Environmental precautions:**

Prevent material from contaminating soil and from entering sewers or waterways.

- **Methods and materials of containment:**

Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth.
Clean up spills immediately.

- **Methods and materials for cleaning up:**

Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.

Section 7: Handling and Storage

- **Handling Precaution:**

Don't handle Battery Pack with metalwork. Do not open, disassemble, crush or burn battery. Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

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• **Storage precautions:**

If the Battery Pack is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically.

3 months: -10°C~+40°C, 45 to 85%RH. And recommended at 0°C~35°C for long period storage.

The capacity recovery rate in the delivery state (50% capacity of fully charged) after storage is assumed to be 80% or more.

The voltage for a long time storage shall be 11.4V~12.0V range.

Do not store Battery Pack haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.

Keep out of reach of children.

Do not expose Battery Pack to heat or fire. Avoid storage in direct sunlight.

Do not store together with oxidizing and acidic materials.

Section 8: Exposure Controls / Personal Protection

• **Engineering Controls**

Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor. Keep away from heat and open flame. Store in a cool, dry place.

• **Personal Protective Equipment:**

Respiratory protection: Not necessary under normal use. In case of battery rupture, use self-contained full-face respiratory equipment.

Hand protection: Not necessary under normal use. Use Vitron rubber gloves if handling a leaking or ruptured battery.

Eye protection: Not necessary under normal use. Wear safety goggles or glasses with side shields if handling a leaking or ruptured battery.

Skin protection: Not necessary under normal use. Use rubber apron and protective working in case of handling of a ruptured battery.

• **Other Protective Equipment:**

Have a safety shower and eye wash fountain readily available in the immediate work area.

• **Hygiene Measures:**

Do not eat, drink, or smoke in work area. Maintain good housekeeping.

Section 9: Physical and Chemical Properties

General Information

Nominal Voltage:	11.4V
Rated Capacity:	2500mAh
Watt hour (Electric energy):	27.75Wh



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Form: Color: Odor:	Solid battery Silvery-White Odorless
Change in conditions Melting point/Melting range: Boiling point/Boiling range:	Not Available Not Available
Flash point:	Not Available
Flammability (solid, gaseous):	Not Available
Ignition temperature:	Not Available
Self-igniting:	Product is not self-igniting
Explosion limits Lower: Upper:	Not Available Not Available
Oxidizing properties:	Not Available
Vapour pressure:	Not Available
Density: Relative density: Vapour density: Evaporation rate:	Not Available Not Available Not Available Not Available
Solubility in/Miscibility with Water:	Not Available
PH-Value:	Not Available
Viscosity Dynamic:	Not Available

Section 10: Stability and Reactivity

- **Stability:** The product is stable under normal conditions.
- **Conditions to Avoid (e.g. static discharge, shock or vibration) :**
 Do not subject Battery Pack to mechanical shock. Vibration encountered during transportation does not cause leakage, fire or explosion. Do not disassemble, crush, short or install with incorrect polarity. Avoid mechanical or electrical abuse.
- **Incompatible Materials:** Not Available
- **Hazardous Decomposition Products:** This material may release toxic fumes if burned or exposed to fire.
- **Possibility of Hazardous Reaction:** Not Available.



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Section II: Toxicological Information

Irritation:	Risk of irritation occurs only if the cell is mechanically, thermally, or electrically abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur.
Sensitization:	Not Available
Neurological Effects:	Not Available
Teratogenicity:	Not Available
Reproductive Toxicity:	Not Available
Mutagenicity (Genetic Effects):	Not Available
Toxicologically Synergistic Materials:	Not Available

Section I2: Ecological Information

General notes:

Water hazard class I (German Regulation) (Self-assessment): slightly hazardous for water do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.

Section I3: Disposal Considerations

Product disposal recommendation: Observe local, state and federal laws and regulations.
 Packaging disposal recommendation: Be aware discarded batteries may cause fire, tape the battery terminals to insulate them. Don't disassemble the battery. Completely discharge container (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local, state and federal laws and regulation.

Section I4: Transport Information

In the case of transportation, confirm no leakage and no overspill from a container.
 Take in a cargo of them without falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handled carefully. Do not give shocks that result in a mark of hitting on a pack. Please refer to Section 7 - HANDLING AND STORAGE also.

- Codes and classifications according to:
- International Air Transport Association (IATA) Dangerous Goods Regulations 2016 (57th Edition)
 IATA-DGR: special provision A88, A99, A154, A164
- International regulations for transport see IMDG CODE: special provision I88

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National regulations for transport land GBI2268-2005

The UN classification number: 3481

- Packaging Instruction PI 967.
- Each cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3
- However, since it corresponds to special provision A88, A99, A154, A164 of ICAO & IATA-DGR, special provision I88 of IMDG CODE, GBI2268-2005 of land regulation, this battery cell can be conveyed normally.
- Shipped at 30% State of Charge—Air Cargo Only.

Section 15: Regulatory Information

• Sara

Section 335 (extremely hazardous substances):

None of the ingredients were listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients were listed.

TSCA (Toxic Substance Control Act):

All components of material are on the US TSCA Inventory

• Proposition 65

Chemicals known to cause cancer:

None of the ingredients were listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients were listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients were listed.

Chemicals known to cause development toxicity:

None of the ingredients were listed.

• Chemicals known to cause development toxicity

EPA (Environmental Protection Agency):

None of the ingredients were listed

IARC (International Agency for Research on Cancer):

None of the ingredients were listed.

NTP (National Toxicology Program):

None of the ingredients were listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients were listed.

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MAK (German Maximum Workplace Concentration):

None of the ingredients were listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients were listed.

OSHA-CA (Occupational Safety & Health Administration):

OSHA hazard communication standard (29 CFR 1910.1200): Non-hazardous

• Labeling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on hazardous Materials (German GefStoffv).

• Special labeling of certain preparations:

Safety data sheet available for professional user on request.

Section 16: Regulatory Information

The information contained in this safety data sheet is based on the present state of knowledge and current legislation.

This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

Reference

Chemical substances information: Japan Advanced Information center of Safety and Health International
Chemical Safety Cards (ICSCs):

International Occupational Safety and Health Information Center (CIS)

1999 TLVs and BEIs: American Conference of Governmental Industrial Hygienists (ACGIH)

International Air Transport Association (IATA)

Regulations specifically applicable to the products: IATA UN No. 3480 / 3481 Special provision A88, A99, A154 and A164