

### **Battery Statement**

Safety Data Sheets (SDSs) are a sub-requirement of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR Subpart 1910.1200. This Hazard Communication Standard does not apply to various subcategories including anything defined by OSHA as an "article." Because all of our batteries are defined as "articles" they are exempt from the requirements of the Hazard Communication Standard 29 CFR 1910.1200, therefore an SDS is not required. We offer this information as a courtesy to our customers.

### **Section 1. Identification of the Substance/Preparation and Company**

**PRODUCT NAME:** Lithium Ion Battery (Li-Ion)

**DESCRIPTION:** Lithium Ion Battery

**USE:** Energy Source

**EMERGENCY TELEPHONE #:** 800-424-9300 (24 HOURS) CHEMTREC; call collect outside continental U.S.: 703-527-3887.

**COMPANY INFORMATION:**

Tracer Products, A Division of Spectronics Corporation

956 Brush Hollow Road, Westbury, NY 11590

800-641-1133

516-333-1254 (for calls originating outside continental U.S.)

[sds@tracerline.com](mailto:sds@tracerline.com)

**Emergency Contact:**

US & Canada 800-424-9300 (24 HOURS) CHEMTREC; Call collect outside continental US & Canada: 703-527-3887.

### **Section 2. Hazards Identification**

**EMERGENCY OVERVIEW:** May explode or leak, and cause burn injury, if recharged, disposed of in fire, mixed with a different battery type, inserted backwards or disassembled. Replace all used batteries at the same time.

Do not remove the battery label.

**Primary Routes of Exposure:** Skin, Eyes, Swallowing

**Medical conditions caused by exposure:** Chemicals may cause burns to skin, eyes, gastrointestinal tract and mucous membranes.

The materials contained in this battery may only represent a hazard if the integrity of the battery is compromised or if the battery is physically or electrically abused.

### **Section 3. Composition/Information on Ingredients**

Common Name/Chemical Name	CAS Number	%W
Lithium Cobalt Oxide	12790-79-3	25-40
Iron	7439-89-6	12-25
Natural Graphite	7782-42-5	10-20
Artificial Graphite	7740-44-0	10-20
Organic Electrolyte	N/A	10-20
Copper	7440-50-8	5-15
Aluminum	7429-90-5	2-6

### **Section 4. First-Aid Measures**

**Eye & Skin Contact:** If cell ruptures, flush with copious quantities of flowing, lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

**Inhalation (breathing):** Get fresh air. If symptoms persist seek medical attention

**Ingestion (swallowing):** Ingestion of battery chemicals can be harmful. Call the National Battery Ingestion Hotline (202-625-3333) 24 hours a day, for procedures treating ingestion of chemicals. Do not induce vomiting.

### **Section 5. Fire-Fighting Measures**

**Flash Point:** Not Available

**Test Method:** Not Available

**Auto-ignition Temperature:** Not Available.

**Special Firefighting Procedures:** wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products. Full protective clothing is necessary. During water application, caution is advised as burning pieces of flammable particles may be ejected from the fire

**Hazardous Combustion and Decomposition Products:** Carbon Monoxide (CO) and other Volatile Organic Compounds.

**Fire and Explosion Hazards:** cells may rupture when exposed to excessive heat. This could result in the release of flammable or corrosive materials. Damaged or opened cells or batteries can result in rapid heating and the release of flammable vapors. Vapors may be heavier than air and may travel along the ground to potential sources of ignition.

**Extinguishing Media:** Use water, foam, or dry powder

### Section 6. Accidental Release Measures

**Spill Containment and Recovery:** If cells are leaking or rupture, prevent skin and eye contact and collect all released material in a plastic lined metal container.

**Disposal:** Dispose of according to applicable local, state and federal regulations.

### Section 7. Handling and Storage

**Handling Conditions:** Batteries are designed to be recharged, however, improperly charging the battery may cause it to ignite. Only approved chargers should be used following approved procedures. Never disassemble a battery or bypass any safety device. Should a battery unintentionally be crushed, thus releasing its contents, rubber gloves must be used to handle all battery components. Care should be taken to avoid the inhalation of any vapors that may be emitted. Do not mix battery systems in the same equipment. Replace all batteries in equipment at the same time. Do not carry batteries loose in a pocket or bag. Do not remove battery label.

**Storage Conditions:** Batteries should be stored in a dry, cool (below 21°C/70°F). Batteries stored in excess of 130°C can result in the venting of flammable liquids and gases from the battery. Batteries should not be stored above 60°C or below -32°C. If packing materials are not available place masking tape on positive and negative ends of the cell to avoid short circuits.

### Section 8. Exposure Controls/Personal Protection

**Engineering Controls/Ventilation:** Not Available.

**Local Exhaust:** Not Available

**Eye Protection:** Always wear safety glasses when working with batteries and cells.

**Skin Protection:** wear gloves if cell ruptures, is corroded or leaking chemicals.

**Respiratory Protection:** Not Available

### Section 9. Physical and Chemical Properties

**Appearance:** Geometric, solid object

**Odor:** None

**Physical State:** Solid

**Specific Gravity (Water=1):** Not Available

**Solubility in Water:** Not Available

**pH:** Not Available

**Boiling Range:** Not Available;

**Vapor Pressure:** Not Available

**Flash Point:** Not Available

**Melting Point:** Not Available

**Vapor Density:** Not Available

**Percent Volatile by Volume:** Not Available

**Reactivity in Water:** Not Available

**Evaporation rate:** Not Available

**Flammable Limits in Air % by Volume:** Not Available

**Volatile Organic Compounds (VOC) Content:** None

**Note:** The physical data presented above are typical values and should not be construed as a specification.

### **Section 10. Stability and Reactivity**

**Chemical Stability:** Stable under normal conditions of storage and use.

**Conditions to Avoid:** Storage above 60°C (140°F). Electrical shorting the cell

**Incompatibility with Other Materials:** Not Available

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** Carbon Monoxide (CO) and other Volatile Organic Compounds.

### **Section 11. Toxicological Information**

No data are available on this product

### **Section 12. Ecological Information**

No data are available on this product.

### **Section 13. Disposal Considerations**

**Disposal:** To prevent short circuit, batteries should be completely discharged prior to disposal or the terminals should be taped and/or capped. When completely discharged it is not considered hazardous. This product does not contain any materials listed by the United States EPA as requiring specific waste disposal requirements. These are exempted from the hazardous waste disposal standards under Universal Waste Regulations. Disposal of large quantities of Lithium Ion batteries or cells may be subject to Local, State or Federal / Provincial regulations. Consult your Local, State and Federal / Provincial regulations regarding disposal of these batteries.

**General Statements:** Federal regulations may apply to empty container. State and/or local regulations may be different.

**Special Instructions:** Be sure to contact the appropriate government environmental agencies if further guidance is required.

### **Section 14. Transport Information**

**Transportation:** This product can be shipped as:

**UN Number: 3480**

**Ground (DOT):** 49 CFR 173.185 lithium cells and batteries

**Air:** IATA Dangerous Goods Regulations

**Sea:** IMDG Code

**Special Shipping Information:** These batteries have been tested to Section 38.3 of 'UN Manual of Test and Criteria.' All Spectronics lithium ion and batteries do not contain more than 20Wh ELC (Equivalent Lithium Contents) for each cell inside battery and 100Wh ELC (Equivalent Lithium Contents) for each battery. It is below the limits set by the IATA Dangerous Goods Regulations 57st edition.

UN manual of Tests and Criteria, Part III, Sup-section 38.3 (withstanding a 1.2m drop (test))

Watt-hour rating is not more than 100 Wh which is shown on the batteries

Labeled with a lithium battery handling label

Package permissible gross weight has been observed

### **Section 15. Regulatory Information**

**General Information:** Regulations specifically applicable to the product include:

—IATA-DGR (air transportation)

—IMO-IMDG Code (sea transportation)

—US Department of Transportation 49 Code of Federal Regulations [USA]

#### **U.S. Federal Regulatory Information:**

This product is not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**SARA Title III Information:** As an article, this battery and its contents are not subject to the requirements of the Emergency Planning and Community Right-To-Know Act

**TSCA: The chemical components of this product are contained on the US TSCA Inventory**

**California - California Proposition 65:** This product contains no chemical known to the State of California to cause cancer.

**CARCINOGEN:** None; **TERATOGENIC:** None; **BOTH CARCINOGEN AND TERATOGENIC:** None

**Canada:** Not Controlled

### **Section 16. Other Information**

**USER'S RESPONSIBILITY:** A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions (in addition to those described herein) are required. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be.

**DISCLAIMER OF LIABILITY:** The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made here under with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the users to comply with all applicable federal, state and local laws and regulations.

**End of Safety Data Sheet**