

This safety data sheet meets the requirements of:  
Regulation (EC)1907/2006

Date of issue 2025-12-24

Versie 1

**Section 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE MANUFACTURER****1.1. Product identification**

Product code           TE-PL802036  
Product name           Li-polymer Battery

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Identified uses           N/A  
Uses advised against    N/A

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

Supplier                   Intronics B.V  
                                  P.O. box 123, 3770 AC Barneveld  
                                  the Netherlands

**For more information, please contact:**

Technical support: +31 342 407 050

**1.4 Emergency contact:**

National Poisons Information Center / University Medical Center Utrecht  
PO Box 85500, 3508 GA Utrecht, The Netherlands  
+31 88 75 585 61  
productnotificatie@umcutrecht.nl  
<https://nvic.umcutrecht.nl/nl/productinformatie>

**Section 2: HAZARD IDENTIFICATION****Hazard Description**

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

**Primary Route(s) of Exposure**

Inhalation, Ingestion, Skin contact and Eye contact

**Potential Health Effects**

**Inhalation**           Vapors or mists from a ruptured battery may cause respiratory irritation  
**Ingestion**           The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus and gastrointestinal tract.  
**Skin**                   Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

**Eye** Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

### Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

#### 3.1 Substances / 3.2 Mixtures

Chemical Composition	Concentration or concentration ranges (%)	CAS No.
Lithium Cobalt Oxide	35.0%	12190-79-3
Aluminium(Al)	5.0%	7429-90-5
Graphite	22.0%	7782-42-5
Copper(Cu)	10.0%	7440-50-8
Phosphate(1-), hexafluoro-, lithium	5.0%	21324-40-3
Polypropylene	5.0%	9003-07-0
Ethylene carbonate	14.0%	96-49-1
Carbonate, methyl ethyl	4.0%	623-53-0

Note: CAS number is Chemical Abstract Service Registry number.

### Section 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

<b>Inhalation</b>	Remove source of contamination or move victim to fresh air. Obtain medical advice.
<b>Skin contact</b>	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes .Get medical aid.
<b>Eye contact</b>	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.
<b>Ingestion</b>	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time.

### Section 5: FIRE-FIGHTING MEASURES

<b>Characteristics of Hazard:</b>	Toxic fumes, gases or vapors may evolve on burning.
<b>Hazardous Combustion Products:</b>	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on.
<b>Fire-extinguishing Methods:</b>	Please use water, dry sand and other proper fire extinguishing media.
<b>Attention in Fire extinguishing:</b>	The firemen should put on anti gasmasks and full fire-fighting suits.

**Section 6: MEASURES FOR THE ACCIDENTAL RELEASE OF THE SUBSTANCE****6.1. 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 equipment as indicated in Section 8.

**6.2. Environmental precautions**

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

**6.3. Methods and material for containment and cleaning up**

**Methods and material for containment:** Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.

**Methods and material 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****7.1. Precautions for safe handling of the substance or mixture****Handling:**

Don't handle the batteries in a manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.

**Storage:**

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

Long period storage:  $-10^{\circ}\text{C}\sim 35^{\circ}\text{C}$ ,  $60\pm 25\%\text{R.H}$

Do not store the battery 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 the battery to heat or fire. Avoid storage in direct sunlight.

Do not store together with oxidizing and acidic materials.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1. Engineering Controls**

No engineering controls are required for handling batteries that have not been damaged. Personal protective equipment for damaged batteries should include chemical resistant gloves and safety glasses.

**8.2. Exposure controls****Individual protection measures, such as personal protective equipment****Hand protection**

Not necessary under conditions of normal use.

**Respiratory Protection:** In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

**Other Protective Clothing or Equipment:** Not necessary under conditions of normal use.

**Personal Protection is recommended for venting battery:** Respiratory Protection, Protective Gloves, Protective Clothing and safety glasses with side shields.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information about basic physical and chemical properties

Properties	Value
Physical State	Form: Solid Color: Silver Odour: Odorless
pH	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	No data available
Solubility (Water)	Insoluble
n-octanol/water partition coefficient	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Odour threshold	No data available
Viscosity	No data available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Stability

Stabil under normal temperatures and pressures.

### 10.2. Conditions to avoid

Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.

### 10.3. Hazardous decomposition products

Toxic Fumes, and may form peroxides.

### 10.4. Possible hazardous reactions

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

**Section 11: TOXICOLOGICAL INFORMATION**

<b>Irritation</b>	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin.
<b>Sensitization</b>	No data is available.
<b>Reproductive toxicity</b>	No data is available.
<b>Toxicologically Synergistic Materials</b>	No data is available.

**Section 12: ECOLOGICAL INFORMATION**

<b>General note:</b>	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
<b>Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity</b>	No data is available
<b>Mobility in soil</b>	No data is available
<b>Persistence and Degradability</b>	No data is available

**Section 13: DISPOSAL INSTRUCTIONS****13.1. Waste treatment methods**

<b>Waste treatment methods:</b>	Recycle or dispose of in accordance with government, stat & local regulations.
<b>Attention for waste treatment:</b>	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treaded similarly. Best way is recycling.

**Section 14: INFORMATION REGARDING TRANSPORT**

The Rechargeable Lithium-ion Battery(model: TE-PL802036) tested according to the requirements of the UNITED NATIONS "Manual of Tests and Criteria" Part III, subsection 38.3;

The rechargeable Lithium-ion Battery was protected so as prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.

The package must be handled with care and that a flammability hazard exists if the package is damaged.

With regard to transport, the following regulations are cited and considered:

- The international Air transport Association (IATA) Dangerous Goods Regulations.

The Rechargeable Lithium-ion Battery can be shipped by air in according to Section IB of Packing Instructions 965, or Section II of Packing Instructions 966~967 of the 2024 IATA Dangerous Goods regulations 65<sup>th</sup> Edition.

UN number of lithium battery: UN3480 or UN3481;  
UN Proper shipping name/description (technical name): Lithium ion batteries or Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment;  
UN Classification (Transport hazard class): Class 9 (PI965 Section IB) or N/A (PI966~967 Section II)  
PG Packing Group: N/A

- The International Maritime Dangerous Goods (IMDG) code.

The Battery is not restricted according to IMO IMDG Code (inc Amdt 41-22).

UN number of lithium battery: UN340 or UN3481;  
UN Proper shipping name/description (technical name): Lithium ion batteries or Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment;  
UN Classification (Transport hazard class): N/A  
PG Packing Group: N/A

Marine pollutant (Y/N): N

Need to meet the Special Provision: International maritime dangerous goods code (IMDG) 188, 230, 348, 384

EmS No: F-A, S-I

### Section 15: REGULATION

Dangerous good Regulations

Recommendations on the Transport of Dangerous Goods Model Regulations

International Maritime Dangerous Goods

Technical Instructions for the safe transport of dangerous goods

Classification and code of dangerous goods

Occupational Safety and Health Act (OSHA)

Toxic Substance Control Act (TSCA)

Consumer Product Safety Act (CPSA)

Federal Environmental Pollution Control Act (FEPCA)

The Oil Pollution Act (OPA)

Superfund Amendments and Reauthorization Act Title III (302/311/312/313) (SARA)

Resource Conservation and Recovery Act (RCRA)

Safety Drinking Water Act (CWA)

California Proposition 65

Code of Federal Regulations (CFR) 49 CFR sections 100-185, 49 CFR-173.185

New EU Battery Regulations (EU) 2023/1542

Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

### Section 16: OTHER INFORMATION

The information in this MSDS has only been compiled based on the information in the relevant materials currently in our possession and is intended only to describe the health,safety and environmental requirements of this product so that all interested parties can better understand and trust this product.However,we makes no warranty of merchant ability or any other warranty,express or implied,with respect to such information,and we assume no liability resulting from its use.Users should make their own investigations to determine the suitability of the information for their particular purposes.Although reasonable precautions have been taken in the preparation of the data contained herein,it is offered solely for your information,consideration and investigation.This material safety data sheet provides guidelines for the safe handling and use of this product;it does not and cannot advise on all possible

situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.

**Date of issue** 2025-12-24

**Revision date** N/A

**Reason for revision:** N/A

**This safety data sheet is in accordance with the requirements of Regulation (EC) 1907/2006; 2023/1542**

**End of the safety data sheet**

Intronics BV  
W.A. Terlouw, QA-compliance officer



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Signature