

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

NAME: Rechargeable Li-Ion Polymer Battery

MODEL: 102050

RATING: 1000mAh, 3.7V, 3.7Wh

SUPPLIER: Wilmar LLC

20413 59th Pl S. Suite 160

Kent, WA 98032

USA

TELEPHONE: (800) 426-1262, (425) 970-6970

2. HAZARDS IDENTIFICATION

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.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Concentration or concentration ranges (%)
Lithium manganese nickel	182442-95-1	29
Iron	7439-86-6	23-24
Graphite	7782-42-5	15-17
Electrolyte	21324-40-3	9-11
Polyvinylidene fluoride	24937-79-9	6-8
Copper	7440-50-8	4-5
Aluminum	7429-90-5	2-4
Carboxymethyl cellulose	9000-11-7	2-3
Carbon black	1333-86-4	0-1
Styrene butadiene rubber	9003-55-8	0-1

4. FIRST AID MEASURES

INHALATION: Remove source of contamination or move victim to fresh air. Obtain medical advice.

ORAL EXPOSURE: Please rinse mouth thoroughly with water, do not induce vomiting. Immediately seek medical treatment.

SKIN CONTACT: Remove contaminated clothes and rinse skin with plenty of water or emergency shower for 15 minutes. Get medical aid.

EYE CONTACT: Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.

5. FIRE FIGHTING MEASURES

CHARACTERISTICS OF HAZARD: Toxic fumes, gases or vapors may be released on burning.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, lithium oxide fumes.

FIRE-EXTINGUISHING METHODS AND EXTINGUISHING MEDIA: Please use water, dry sand, foam, and other proper fire extinguishing media.

PROTECTION FOR FIRE FIGHTERS AND OTHERS: Responders should wear self-contained breathing apparatuses and full fire-fighting suits. Prevent contact with skin and eyes. Do not extinguish from a position down wind of the fire. Evacuate those who are not responding.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Use personal protective equipment. Ensure adequate ventilation, Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off. Remove all sources of ignition.

PRECAUTIONS TO PROTECT THE ENVIRONMENT: Keep product out of sewers and waterways.

SPILL CLEAN-UP PROCEDURES: Take all the precautions listed in this file. Use water mixed with abluent to clean up the contaminated area. Use absorbent. Avoid contact with eyes or skin. Avoid discharge into all sorts of waterways.

METHODS AND MATERIALS FOR CLEANING UP: Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an appropriate waste container. Collect all contaminated absorbent and

do not allow to reach ground water, sewage system or waterways. Scrub the area with detergent and water. Water

7. HANDLING AND STORAGE

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

STORAGE: If the battery is subject to storage for more than 3 months, it is recommended to recharge the battery periodically.

LONG PERIOD STORAGE: $25\pm 5^{\circ}\text{C}$, $60\pm 25\%$ relative humidity. 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

OTHER CONSIDERATIONS: Do not expose the battery to heat or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic materials.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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.

PERSONAL PROTECTIVE EQUIPMENT:

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.

Protective Gloves: 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 glass with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Silver, rectangular

PHYSICAL STATE: Solid

FORM: Approximate Cylinder

MELTING POINT: > 300 degrees C

ODOR: Odorless

SOLUBILITY: Partially soluble in water

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures.

CONDITIONS TO AVOID: Heat above 70°C and attempts to incinerate, deform, mutilate, crush, disassemble, overcharge, short circuit, or expose over a long period to humid conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes. May form peroxides.

POSSIBILITY OF HAZARDOUS REACTION: If leaks occur, do not contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

11. TOXICOLOGICAL INFORMATION

IRRITATION: In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin.

SENSITIZATION: Not applicable.

REPRODUCTIVE TOXICITY: Not applicable.

TOXICOLOGICALLY SYNERGISTIC MATERIALS: Not applicable.

12. ECOLOGICAL INFORMATION

ENVIRONMENT EFFECT: Will not have chronic effect on aquatic environments.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL PROCEDURES: Recycle or dispose of in accordance with government, state & local regulations. Used batteries may not be treated as ordinary trash. Do not dispose of in fire or high temperature. Do not dissect, pierce, or crush. Recycle.

14. TRANSPORT INFORMATION

The battery passed the test items of the UNITED NATIONS Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" section 38.3 and meet the requirements of the UNITED NATIONS.

The battery shall be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuiting.

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

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

Regarding transportation, the following regulations are cited and considered:

The international Civil Aviation Organization (ICAO) Technical Instructions. (ICAO)

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

The battery can be shipped by air in according to PACKING INSTRUCTION 965 Section IB, or PACKING INSTRUCTION 966 967 Section II of the 2023 IATA Dangerous Goods regulations 64th Edition.

UN number: 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 Not applicable (PI966 967 Section II)

UN Packing Group: Not applicable.

The international Maritime Dangerous Goods (IMDG) Code. (IMDG)

UN number: 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): Not applicable.

UN Packing Group: Not applicable

The battery is not restricted according to IMO IMDG Code (inc. Amendment 40-20) Special Provision 188.

15. REGULATORY INFORMATION

International Civil Aviation Organization (ICAO) Technical Instructions ICAO (ICAO)

1. Unless exempted according to ICAO TI, the lithium ion cell/batteries (UN 3480 PI 965) and lithium metal cell/batteries (UN 3090 PI 968) are forbidden for carriage on passenger aircraft.
2. Unless approved according to ICAO TI, Lithium ion cells/batteries (UN 3480 PI 965) must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 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.