RIXUS

PRODUCT SAFETY DATA SHEET / ARTICLE INFORMATION SHEET

Document No:	SDS-RXAA07-2025	**Issue Date:**	November 13, 2025
Product Name:	Rechargeable AAA Battery 4-Pack	**Model Ref:**	RXAA07
Item Code / EAN:	A00005121 (Ref: RXAA07)	**Battery Type:**	Lithium-ion Secondary Cell

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product Identifier
Commercial Name: Rixus Rechargeable AAA Battery 880mWh with USB-C Cable (4-Pack)
Model: RXAA07

1.2 Relevant Identified Uses
Rechargeable consumer AAA battery for electronic devices. Advised against uses that puncture, short-circuit, incinerate, or expose cells to temperatures above 60°C.

1.3 Supplier Details
Rixus B.V.
P.O. Box 868, Eindhoven
The Netherlands
Website: www.rixus.eu

1.4 Emergency Telephone Number
Contact your regional National Poisons Information Centre or local emergency services response network.

2. HAZARDS IDENTIFICATION

Regulatory Status: As an "Article" under REACH (EC 1907/2006), OSHA Hazard Communication, and GHS standards, this product is hermetically sealed. Under normal operating conditions, internal chemical ingredients are completely isolated and present no exposure or safety hazards.

> **POTENTIAL HAZARD WARNING (ONLY APPLICABLE IN CASE OF SEVERE MECHANICAL/THERMAL ABUSE OR STRUCTURAL RUPTURE):**
> Electrolyte leakage can cause severe chemical skin burns, eye damage, and toxic respiratory irritation if vaporized.

GHS Label Elements (Only relevant to internal electrolyte content if leaked):

- **Signal Word:** Danger
- **Hazard Statements:** H302: Harmful if swallowed | H314: Causes severe skin burns and eye damage | H317: May cause an allergic skin reaction.
- **Precautionary Statements:**
  P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
  P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
  P303+P361+P353: IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water or shower.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Formula	CAS Number	Weight % Range
Lithium Cobalt Oxide / Lithium Iron Phosphate	$LiCoO_2$ / $LiFePO_4$	12190-79-3 / 15365-14-7	25% – 40%
Graphite	C	7782-42-5	10% – 20%
Organic Electrolyte (Carbonate Solvent Mix)	EC / DMC / DEC	Mixed Mix	10% – 18%
Lithium Hexafluorophosphate	$LiPF_6$	21324-40-3	1% – 5%
Steel, Copper, Aluminum (Casing Components)	Fe, Cu, Al	7439-89-6 / 7440-50-8	20% – 30%

4. FIRST AID MEASURES

In case of physical cell damage resulting in contact with internal ingredients:

- **Inhalation:** Remove patient immediately to fresh air. Seek medical attention if respiratory discomfort or coughing persists.
- **Skin Contact:** Strip off contaminated clothing immediately. Rinse skin thoroughly with plenty of water and soap for at least 15 minutes. Seek medical advice for chemical burns.
- **Eye Contact:** Flush immediately with gently running water for 15 minutes, holding eyelids wide open. Remove contact lenses if applicable. Seek immediate emergency ophthalmologic attention.
- **Ingestion:** Rinse out mouth completely with fresh water. **Do not induce vomiting.** Seek urgent medical attention.

5. FIREFIGHTING MEASURES

- **Suitable Extinguishing Media:** Dry chemical, copper powder, dry sand, or large amounts of cold water to cool surrounding cells and stop thermal runaway chain reactions.
- **Unsuitable Extinguishing Media:** Do not use minimal amounts of water. Avoid CO_2 if vast quantities of commercial stockpiles are involved.
- **Special Hazards:** Cells may explode, vent violently, or emit highly toxic gases (Hydrogen Fluoride (HF), Carbon Monoxide, volatile organic hydrocarbons) when subjected to fire.
- **Protective Equipment:** Firefighters must wear full structural fire protective gear and explicit Self-Contained Breathing Apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** If cells crack open, evacuate the immediate perimeter. Avoid direct exposure to skin/eyes. Wear heavy-duty nitrile gloves, safety goggles, and protective apparel.
- **Environmental Precautions:** Restrict spilled materials or rinsing agents from infiltrating drainage lines, surface waters, or underground water tables.

- **Clean-up Methods:** Absorb spilled electrolyte liquid with dry sand or inert vermiculite. Place compromised cells and waste residues securely into a plastic-lined recovery drum for hazardous waste handling.

7. HANDLING AND STORAGE

7.1 Safe Handling: Do not crush, pierce, drop from height, open manually, or short-circuit terminals. Recharge only via standard 5V USB-C interfaces using correct specification cables. Prevent battery terminals from crossing with bulk conductors like loose keys, coins, or metallic storage racks.

7.2 Storage Conditions: Store in a cool, dry, climate-regulated space (Recommended optimum: 15°C to 25°C). Avoid high moisture environments, direct exposure to solar rays, and proximity to volatile combustible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Not required under normal consumer or logistics operations. Keep out of reach of children.
Personal Protective Equipment (PPE): No protective equipment needed during typical routine use. For industrial processing or sorting damaged cells, use heavy-duty chemical-resistant nitrile gloves, safety goggles, and lab protective wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical Appearance:** Solid Cylindrical AAA Form
- **Nominal Output Voltage:** 1.5V (Regulated output)
- **Total Capacity:** 580 mAh / 880 mWh
- **Odor:** Odorless (unless leaking)
- **USB-C Charge Input:** 5V Direct Input
- **Water Solubility:** Insoluble structural outer shell

10. STABILITY AND REACTIVITY

- **Chemical Stability:** Fully stable under recommended temperature metrics and storage conditions.
- **Conditions to Avoid:** Heating beyond 60°C, direct incineration, prolonged structural short circuits, or exposure to moisture.
- **Incompatible Materials:** Highly active oxidizing components, deep acids, and unstructured conductive metals.
- **Hazardous Decomposition Products:** Corrosive Hydrogen Fluoride (*HF*) gas, carbon oxides, and toxic metal oxides are only emitted during complete thermal breakdown or fire exposure.

11. TOXICOLOGICAL & 12. ECOLOGICAL INFORMATION

Toxicological Profile: Under normal operation, internal materials pose no risk. Cobalt components are listed as possible carcinogens but are completely isolated in a hermetic casing. Leaked electrolyte is highly caustic to biological tissues.

Ecological Impact: Large volume structural failures could lead to heavy metal pollution in localized water networks. Avoid release into the natural ecosystem.

13. DISPOSAL CONSIDERATIONS

Do not discard into household regular municipal waste bins. Product must be recycled safely at designated electronics/battery recovery processing points in strict adherence with **European Battery Regulation (EU)**

2023/1542, local WEEE operational parameters, or respective national frameworks. Tape or insulate the outer cell contacts before collection to mitigate any accidental short-circuits during transport.

14. TRANSPORT INFORMATION

Rixus RXAA07 cells are rigorously certified according to the **UN Manual of Tests and Criteria, Part III, subsection 38.3 (UN38.3)**.

- **UN Number:** UN 3480 (Shipped as batteries alone) or UN 3481 (Shipped packed with/in equipment).
- **Proper Shipping Name:** LITHIUM ION BATTERIES.
- **Transport Hazard Class:** Class 9 (Miscellaneous Dangerous Goods).
- **Air Transport (IATA DGR):** Packed under PI 965 Section IB or II. Shipped state of charge (SoC) must not exceed 30% for commercial air transit.
- **Surface / Maritime Transport (ADR / IMDG):** Handled under Packing Instruction PI 903. Special exemptions apply for low watt-hour ratings (RXAA07 is approx. 0.88Wh, well below the standard 20Wh threshold limits).

15. REGULATORY INFORMATION & 16. OTHER INFORMATION

Regulatory Compliance: Fully compliant with **Regulation (EU) 2023/1542**, European CE Marking directives, RoHS Directive (2011/65/EU), and REACH Regulation EC 1907/2006. Compliant with US OSHA Hazard Communication Standard 29 CFR 1910.1200.

Disclaimer: The data and technical evaluations supplied herein represent the current absolute state of manufacturing safety records available as of the date of compilation. This sheet addresses risk reduction under internal breach circumstances. It remains the legal mandate of the commercial buyer, logistics vendor, or product user to handle shipments and consumer deployment in complete accordance with global, maritime, and regional legal frameworks.