

Lithium-Ion Battery – Portable Power Station

| Product Name | Duracell Portable Power Station (Lithium-Ion Batteries) |
|-------------------------------|--|
| Chemical System | Lithium Nickel Cobalt Manganese Oxide |
| Description | Duracell Branded Consumer Lithium Battery |
| Product Category | Electro-Technical Device |
| Use | Portable power source for electronic devices. |
| Global sub-brands (Retail) | Duracell |
| Model Numbers | RT300, D500, RT600, RT1000 |
| Principles of Operation | A battery powers a device by converting stored chemical energy into electrical energy. |
| Document ID | PSDS – Lithium Ion PPS |
| Information Contact | SDS@duracell.com |
| Date Updated | 6/13/2022 |
| Preparer | Product Safety & Regulatory |

This Product Safety Data Sheet (PSDS) provides relevant battery information to retailers, consumers, OEMs, and other users requesting a GHS-compliant PSDS. Articles, such as batteries, are exempt from GHS PSDS classification criteria. The GHS criteria is not designed or intended to be used to classify the physical, health, and environmental hazards of an article. Branded consumer batteries are defined as electro-technical devices. The design, safety, manufacture, and qualification of branded consumer batteries follow ANSI and IEC battery standards. This document is based on principles set forth in the following hazard communication approaches ANSI Z-400.1, GHS, JAMP AIS, and IEC 62474.

Section 1: MANUFACTURER'S INFORMATION

| Importer's Name and Address | Duracell US Operations, Inc. 14 Research Drive, Bethel, CT USA 06801 |
|--------------------------------|---|
| US Telephone | (203) 796-4000 |
| Global Website | www.duracell.com |
| Consumer Relations | <u>North America</u> 1-800-551-2355 (9:00 AM - 5:00 PM EST) |

Section 2: HAZARD IDENTIFICATION

Product is a sealed article, not a mixture or substance. Exposure to contents inside the sealed battery will not occur unless the battery leaks, is exposed to high temperatures, or is mechanically abused.

Section 3: COMPOSITION

| Applicable Battery Industry Standards | UN 38.3, ETL, CEC, FCC, DOE |
|--|-----------------------------|
| Description | Branded Consumer Battery |

| COMPONENTS | INGREDIENTS | CAS NUMBER | |
|------------|-------------|------------|--|
| | | | |



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| Lithium Nickel Cobalt Manganese Oxide | 12190-79-3 | 25-35% | |
|--|---------------------------------|--------|--|
| Graphite | 77842-42-5 | 15-20% | |
| Polyvinylidene | 24937-79-9 | 1-5% | |
| Acetylene Black | 1333-86-4 | 0.5-3% | |
| Electrolyte: (Ethyl Methyl Carbonate (EMC)/ Dimethyl Carbonate (DC)/ Ethylene Carbonate (EC)) | 623-53-0 616-38-6 96-49-1 | 5-15% | |
| Aluminum | 7429-90-5 | 21-23% | |
| Copper | 7440-50-8 | 10-11% | |
| Lithium Hexafluorophosphate | 21324-40-3 | 10-15% | |
| | | | |

Section 4: FIRST AID MEASURES

| (In case of elect | rolyte leakage from the battery.) | |
|----------------------------------|---|--|
| Eye Contact | Flush thoroughly with copious amounts of running water for at least 30 minutes. Hold eyelids open to assure thorough flushing. Seek immediate medical attention. | |
| Skin Contact | Immediately remove contaminated clothing and shoes while flushing with water. Continue to flush exposed skin with water for at least 15 minutes. Seek medical attention if irritation develops and persists. Launder contaminated clothing before reuse and discard shoes and other items that cannot be decontaminated. | |
| Ingestion | Swallowing is not anticipated due to battery size. Irritation to the internal/external mouth area may occur following exposure to a leaking battery. Do not induce vomiting, give food or drink. Seek medical attention immediately. | |
| Note to Physician | For information on battery identification and treatment, call the 24- hour National Battery Ingestion Hotline (800-408-8666) . Additional treatment information is available from the National Capital Poison Control Center Button Battery Ingestion Triage and Treatment Guideline : https://www.poison.org/battery/guideline. <u>http://globalcrisis.info/poisonemergency.html#AAA</u> | |
| Poison Center World Directory | http://globalcrisis.info/poisonemergency.html#AAA | |
| Inhalation | Contents of leaking battery may be irritating to respiratory passages. Move to fresh air. Seek medical attention if irritation persists. | |

Section 5: FIRE FIGHTING MEASURES

| In case of fire, you can use fire extinguishers appropriate for a solid material fire; the recommended sequence is water or water mist, sand, CO2, powder. Use any extinguishing media appropriate for the surrounding materials. For incipient (beginning) fires copious amounts of water are effective in cooling burning lithium ion batteries. Fire fighters should use appropriate PPE for the fumes and heat |
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| Extinguishing Media | In case of fire, you can use fire extinguishers appropriate for a solid material fire; the recommended sequence is water or water mist, sand, CO2, powder. Use any extinguishing media appropriate for the surrounding materials. For incipient (beginning) fires copious amounts of water are effective in cooling burning lithium ion batteries. Fire fighters should use appropriate PPE for the fumes and heat |
|---------------------------------------|---|
| Unusual Fire and Explosion Hazards | Not classified as an oxidizer based on test data, however, thermal decomposition of product may release oxygen that can accelerate rate of combustion of surrounding fire. |
| Advice for Fire-Fighters | Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Fight fire from a distance or protected area. Cool fire-exposed containers to prevent rupture. Do not breathe smoke, gases or vapors generated. Detailed information on fighting a lithium metal battery fire can be found in US DOT Emergency Response Guide 138 (Substances–Water–Reactive). Keep unprotected persons away. |

| Section 6: ACCIDENTAL RELEASE INFORMATION | | |
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| | Clean-up personnel should wear appropriate protective clothing to prevent eye and skin contact and inhalation of dust. Ventilate area of spill. Avoid creating airborne dust. Eliminate all sources of ignition. Keep spilled material away from combustible materials. | |
| Personal Precautions, Protective Equipment and Emergency Procedures | Clean-up personnel should wear appropriate protective clothing to prevent eye and skin contact and inhalation of dust. Ventilate area of spill. Avoid creating airborne dust. Eliminate all sources of ignition. Keep spilled material away from combustible materials. | |
| Environmental Precautions | Avoid release to the environment without proper government permits. Prevent entry into storm sewers and waterways. Report spills as required by local and national regulations. | |
| Methods and Material for Containment and Cleaning Up | Do not use combustible absorbents or dust control products. Carefully collect material with a scoop. Do not generate airborne dust. Place in appropriate container for disposal. Rinse the spill area with water after clean-up is complete. Collect rinse water for appropriate treatment and disposal. Remove any spilled liquid with absorbent material and contain it for disposal. | |

| Section 7: HANDLING AND STORAGE | | |
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| Precautions for Safe Handling | Do not short circuit, or dispose into fire. Do not crush for Safe Handling | |
| | | |
| Conditions for Safe Storage (Including any Incompatibilities) | Store in cool, dry place in original packaging. Do not store with acids. Store away from reducing agents. Operating Temperature 0°C to 40°C Storage Temperature (for shipping state) Short Term (less than three months) -10°C to 45°C Long Term Storage 6°C to 29°C | |



Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| No PPE is necessary | |
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| Consumer Product | |

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| Article | |
|----------------------|----------------|
| Physical Description | Not Applicable |
| Chemical Properties | Not Applicable |

Section 10: STABILITY AND REACTIVITY

Stable and Non-Reactive under 60°C.

Section 10: STABILITY AND REACTIVITY

The chemicals in this product are contained in a sealed unit and exposure does not occur during normal handling and use.

Venting cells may have ether smell. If strong smell persists, or cell leakage is observed, it should be disposed of per local regulations.

Mercury, Lead, and Cadmium are not used in the cell. (Note: If traces are found, they may be from impurity of raw materials, not added as part of the recipe.)

Section 12: ECOLOGICAL INFORMATION

The chemicals in this product are contained in a sealed can and exposure does not occur during normal handling and use.

Venting cells may have ether smell. If strong smell persists, or cell leakage is observed, it should be disposed of per local regulations.

Mercury, Lead and Cadmium are not used in the cell. (**Note:** If traces are found, they may be from impurity of raw materials, not added as part of recipe.)

Section 13:DISPOSAL CONSIDERATIONS

Collect and Proper Disposal per local regulations. Recycling is suggested.

Section 14:TRANSPORATION INFORMATION

UN38.3 TEST Summary Documents



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| | UN38.3 Test Summary Documents that are required by the UN Model Regulations, can be | |
|---|--|---------------------|
| | requested by sending an email request to UN38.3 duracell@duracell.com. | |
| | Duracell lithium metal batteries are produced and delivered in accordance with current IATA/ICAO regulations. Duracell lithium metal batteries can be by air shipped in accordance with ICAO or IATA. Shipping packages for all DURACELL lithium cells/batteries are designed to prevent short circuits, movement within the package, damage to the cells/batteries, and release of the package contents. Persons who prepare or offer lithium batteries for transport are required by regulation to be trained to the extent of their responsibility. The information in this section is provided for informational purposes only. The transportation of lithium- ion batteries is regulated by ICAO, IATA, IMO, ADR, and US DOT. | |
| UN Identification Number/Shipping Name | UN3480, Lithium-ion Battery, 9 | Wattage – Wh rating |
| | Model | 292 |
| | RT300 | 515 |
| | D500 | 569 |
| | RT600 | 1050 |
| | RT1000 | |
| IATA 63 rd , 2022 edition | PI965 Section IA All models are greater than 100 Whr State of Charge (SoC) must be below 30% | |
| IMDG | Fully regulated battery only shipment (UN3480, Lithium-ion Battery, 9) | |
| US DOT | RT300; classified as a medium battery – UN packaging exemption for gross shipments 30 kg or less. All other models are classified as a larger battery – Fully regulated shipment | |
| Emergency Transportation Hotline | CHEMTREC 24-Hour Emergency Response Hotline | |
| F | Within the United States, call: 1-800-424-9300 | |
| Transportation Hotline | Outside of the United States, call: 1-703-527-3887 (Collect) | |
| Section 15: REGULATORY INFORMATION | | |
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GHS Article Exception Section 1.3.2.1

Section 16: OTHER INFORMATION

A Lithium-ion battery is a safe consumable product under recommended or normal usage conditions. It is not a dangerous substance or mixture. There are no PSDS supply requirements for Lithium-ion batteries by the Globally Harmonized System (GHS). Duracell is providing this PSDS as a service to its customers and other users who may make use of alkaline batteries in the workplace.

Disclaimer: This PSDS is intended to provide a summary of our knowledge and guidance regarding the use of this product. The information contained here has been compiled from sources considered by Duracell US Operations, Inc. to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations. This information is offered in good faith. Each user of this material need s to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. Duracell US Operations, Inc. assumed no responsibility for injury to the recipient or third parties, or any damage to any property resulting from the misuse of the product.

*********** End of PSDS **********



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